# PART 70 OPERATING PERMIT and ENHANCED NEW SOURCE REVIEW OFFICE OF AIR MANAGEMENT

# CMI-Wabash Cast, Inc. 3837 West Mill Street Extended Wabash, Indiana 46992

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T169-6598-00042	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:

CMI-Wabash Cast, Inc.

Page 2 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### **TABLE OF CONTENTS**

#### A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

#### B GENERAL CONDITIONS

- B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]
- B.2 Definitions [326 IAC 2-7-1]
- B.3 Permit Term [326 IAC 2-7-5(2)]
- B.4 Enforceability [326 IAC 2-7-7(a)]
- B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]
- B.6 Severability [326 IAC 2-7-5(5)]
- B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]
- B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]
- B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]
- B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]
- B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)]
- B.13 Emergency Provisions [326 IAC 2-7-16]
- B.14 Permit Shield [326 IAC 2-7-15]
- B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]
- B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
- B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination
- B.18 Permit Renewal [326 IAC 2-7-4]
- B.19 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]
- B.20 Permit Revision Under Economic Incentives and Other Programs
- B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]
- B.22 Operational Flexibility [326 IAC 2-7-20]
- B.23 Construction Permit Requirement [326 IAC 2]
- B.24 Inspection and Entry [326 IAC 2-7-6(2)]
- B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]
- B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]
- B.27 Enhanced New Source Review [326 IAC 2]

#### C SOURCE OPERATION CONDITIONS

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- C.1 Major Source
- C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates
- C.3 Opacity [326 IAC 5-1]
- C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- C.6 Fugitive Dust Emissions [326 IAC 6-4]
- C.7 Operation of Equipment [326 IAC 2-7-6(6)]
- C.8 Stack Height [326 IAC 1-7]
- C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

#### Testing Requirements [326 IAC 2-7-6(1)]

C.10 Performance Testing [326 IAC 3-6]

CMI-Wabash Cast, Inc.

Page 3 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

# Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

- C.11 Compliance Schedule [326 IAC 2-7-6(3)]
- C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.13 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
- C.14 Monitoring Methods [326 IAC 3]
- C.15 Pressure Gauge Specifications

## Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
- C.18 Compliance Monitoring Plan Failure to Take Response Steps [326 IAC 2-7-5]
- C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
- C.21 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]
- C.22 General Record Keeping Requirements [326 IAC 2-7-5(3)]
- C.23 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

#### **Stratospheric Ozone Protection**

C.24 Compliance with 40 CFR 82 and 326 IAC 22-1

# D.1 FACILITY OPERATION CONDITIONS - Reverberatory Furnaces (S-1)

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 Particulate Matter (PM) [326 IAC 6-3]
- D.1.2 Stack Height

#### **Compliance Determination Requirements**

D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D 1.4 Visible Emissions Notation

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.5 Record Keeping Requirements

#### D.2 FACILITY OPERATION CONDITIONS - Prototype Furnace (S-2)

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

# **Compliance Determination Requirements**

D.2.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D 2.3 Visible Emissions Notation

# Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.4 Record Keeping Requirements

CMI-Wabash Cast, Inc.

Page 4 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

# D.3 FACILITY OPERATION CONDITIONS - Mold Making and Sand Reclamation (SC-1)

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.3.1 Volatile Organic Compounds (VOC) [326 IAC 2-2]
- D.3.2 Particulate Matter (PM) [326 IAC 6-3]
- D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

#### **Compliance Determination Requirements**

D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.3.5 Particulate Matter (PM).
- D.3.6 Visible Emissions Notations
- D.3.7 Parametric Monitoring
- D.3.8 Cyclone Wet Scrubber Inspections
- D.3.9 Failure Detection

# Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.3.10 Record Keeping Requirements
- D.3.11 Reporting Requirements

# D.4 FACILITY OPERATION CONDITIONS - Shakeout and Dump Conveyor (SC-2)

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.4.1 Particulate Matter (PM) [326 IAC 6-3]
- D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

#### **Compliance Determination Requirements**

D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.4.4 Particulate Matters (PM)
- D.4.5 Visible Emissions Notations
- D.4.6 Parametric Monitoring
- D.4.7 Cyclone Wet Scrubber Inspections
- D.4.8 Failure Detection

# Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.9 Record Keeping Requirements

# D.5 FACILITY OPERATION CONDITIONS - Old Core Machines (SC-3)

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Volatile Organic Compounds (VOC) [326 IAC 2-2]

#### **Compliance Determination Requirements**

D.5.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.5.3 Parametric Monitoring
- D.5.4 Acid Scrubber Inspections
- D.5.5 Failure Detection

 CMI-Wabash Cast, Inc.
 Page 5 of 57

 Wabash, Indiana
 OP No. T169-6598-00042

Permit Reviewer: TE/EVP

# Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.5.6 Record Keeping Requirements
- D.5.7 Reporting Requirements

# D.6 FACILITY OPERATION CONDITIONS - Knockout Machines (BH-1)

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.6.1 Particulate Matter (PM) [326 IAC 6-3]
- D.6.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

#### **Compliance Determination Requirements**

D.6.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.6.4 Particulate Matter (PM)
- D.6.5 Visible Emissions Notations
- D.6.6 Parametric Monitoring
- D.6.7 Baghouse Inspections
- D.6.8 Broken or Failed Bag Detection

# Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.9 Record Keeping Requirements

# D.7 FACILITY OPERATION CONDITIONS - Pouring Operation (F-1)

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Particulate Matter (PM) [326 IAC 6-3]

#### **Compliance Determination Requirements**

D.7.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

# D.8 FACILITY OPERATION CONDITIONS - Core Machines (SC-4)

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.8.1 Volatile Organic Compound (VOC) [326 IAC 8-1-6] [326 IAC 2-2]
- D.8.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

# **Compliance Determination Requirements**

D.8.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.8.4 Volatile Organic Compounds
- D.8.5 Parametric Monitoring
- D.8.6 Acid Scrubber Inspections
- D.8.7 Failure Detection

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.8.8 Record Keeping Requirements
- D.8.9 Reporting Requirements

# D.9 FACILITY OPERATION CONDITIONS - Core Machine (SC-5)

# **Compliance Determination Requirements**

D.9.1 Testing Requirements [326 IAC 2-7-6(1),(6)]

CMI-Wabash Cast, Inc. Wabash, Indiana Permit Reviewer: TE/EVP

# D.10 FACILITY OPERATION CONDITIONS - Blasting Operations (BH-3)

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.10.1 Particulate Matter (PM) [326 IAC 6-3]
- D.10.2 Particulate Matter (PM) 10 [326 IAC 2-2]
- D.10.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

# **Compliance Determination Requirements**

D.10.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.10.5 Particulate Matter (PM)
- D.10.6 Visible Emissions Notations
- D.10.7 Parametric Monitoring
- D.10.8 Baghouse Inspections
- D.10.9 Broken or Failed Bag Detection

# Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.10.10 Record Keeping Requirements

#### Certification

Emergency/Deviation Occurrence Report Quarterly Report Forms-55 Quarterly Compliance Monitoring Report CMI-Wabash Cast, Inc.

Page 7 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### **SECTION A**

#### **SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

# A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary aluminum foundry that processes automobile engine castings.

Responsible Official: Gary Barlow

Source Address: 3837 West Mill Street Extended, Wabash, Indiana, 46992

Mailing Address: P. O. Box 668, 3837 West Mill Street Extended, Wabash, Indiana, 46992

SIC Code: 3365 County Location: Wabash

County Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Major Source, under PSD

Major Source, Section 112 of the Clean Air Act

# A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (1) One (1) melting and combustion operation (S-1) consisting of two (2) reverberatory furnaces each processing aluminum at a rate of 7.0 tons per hour, each rated at 39 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting to two (2) stacks (Stacks 2.41 and 2.42);
- (2) One (1) melting and combustion operation (S-2) consisting of one (1) prototype crucible furnace processing aluminum at a rate of 1.25 tons per hour, rated at 7 million (mm) British thermal units (Btu) per hour, combusting natural gas;
- One (1) mold making and sand reclamation operation (SC-1) processing a metal throughput of 11.39 tons per hour with a cyclone wet scrubber for particulate matter control and exhausting to one (1) stack (Stack 2.11);
- (4) One (1) shakeout and vibrating dump conveyor (SC-2) processing a metal throughput of 11.39 tons per hour with a cyclone wet scrubber for particulate matter control and exhausting to one (1) stack (Stack 2.12);
- (5) Six (6) old core machines (SC-3) each capable of producing a maximum of 6,300 pounds of cores per hour, with six (6) acid scrubbers for VOC control and exhausting to six (6) stacks (Stacks 1.11, 1.12, 1.14, 1.15, 1.16, and 1.17);
- (6) One (1) knockout operation (BH-1), including a rotary sand separator with a baghouse for particulate matter control, exhausting to one (1) stack (Stack 2.21);
- (7) One (1) pouring operation (F-1) utilizing molten aluminum from the melting operations and a primary aluminum vendor for a process rate of 11.39 tons per hour;

CMI-Wabash Cast, Inc.

Page 8 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(8) Two (2) core machines (SC-4) each capable of producing a maximum of 3,300 pounds of cores per hour, with one (1) acid scrubber for VOC control and exhausting to one (1) stack (Stack 1.18);

- (9) One (1) manual prototype core making operation (SC-5) with a maximum capacity of processing 200 pounds of sand per hour, having no emission control equipment or external stack or vent;
- (10) One (1) mechanical blasting operation (BH-3) with a process rate of 32.7 tons per hour that is a combination of the steel shot throw rate (27 tons per hour) and the aluminum casting throughput (5.7 tons per hour), with a dust collector for particulate control.

# A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1 (21) that have applicable requirements.

#### A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

 CMI-Wabash Cast, Inc.
 Page 9 of 57

 Wabash, Indiana
 OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### **SECTION B**

#### **GENERAL CONDITIONS**

# B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

## B.2 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

#### B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

# B.4 Enforceability [326 IAC 2-7-7(a)]

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

#### B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

#### B.6 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

#### B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

# B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015 CMI-Wabash Cast, Inc.

Page 10 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.

(c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

# B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

#### B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015 CMI-Wabash Cast, Inc.

Page 11 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The identification of each term or condition of this permit that is the basis of the certification:
  - (2) The compliance status;
  - (3) Whether compliance was based on continuous or intermittent data;
  - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
  - (5) Any insignificant activity that has been added without a permit revision; and
  - (6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

# B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015 CMI-Wabash Cast, Inc.

Page 12 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

#### B.13 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Management,

Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and

CMI-Wabash Cast, Inc.

Page 13 of 57
Wabash, Indiana

OP No. T169-6598-00042

Wabash, Indiana Permit Reviewer: TE/EVP

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

# B.14 Permit Shield [326 IAC 2-7-15]

- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
  - (1) The applicable requirements are included and specifically identified in this permit; or

CMI-Wabash Cast, Inc.

Page 14 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.

- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(8)]

# B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

# B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015 CMI-Wabash Cast, Inc.

Page 15 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

within ten (10) calendar days from the date of the discovery of the deviation.

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
- (2) An emergency as defined in 326 IAC 2-7-1(12); or
- (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
- (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

# B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAM, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

CMI-Wabash Cast, Inc.

Page 16 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

# B.18 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due. [326 IAC 2-5-3]
  - (2) If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

  If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAM, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)] If IDEM, OAM, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

# B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

CMI-Wabash Cast, Inc.

Page 17 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

# B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

#### B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

#### B.22 Operational Flexibility [326 IAC 2-7-20]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any approval required by 326 IAC 2-1 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:

CMI-Wabash Cast, Inc.

Page 18 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
  - (1) A brief description of the change within the source;
  - (2) The date on which the change will occur;
  - (3) Any change in emissions; and
  - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
  - The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

  The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAM, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

CMI-Wabash Cast, Inc.

Page 19 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

# B.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

#### B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

  [326 IAC 2-7-6(6)]
  - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
  - (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

#### B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]

Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner. CMI-Wabash Cast, Inc.

Page 20 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) IDEM, OAM, shall reserve the right to issue a new permit.

# B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

# B.27 Enhanced New Source Review [326 IAC 2]

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

CMI-Wabash Cast, Inc.

Page 21 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### SECTION C

#### **SOURCE OPERATION CONDITIONS**

#### **Entire Source**

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### C.1 Major Source

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), this source is a major source.

C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

# C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9, or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor), in a six (6) hour period.

# C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

# C.5 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

# C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

# C.7 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

# C.8 Stack Height [326 IAC 1-7]

(a) The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

CMI-Wabash Cast, Inc.

Page 22 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

# C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
  The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and
  40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for
  any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3)
  square feet on any other facility components or a total of at least 0.75 cubic feet on all
  facility components.
- (f) Indiana Accredited Asbestos Inspector
  The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
  prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
  thoroughly inspect the affected portion of the facility for the presence of asbestos. The
  requirement that the inspector be accredited is federally enforceable.

CMI-Wabash Cast, Inc.

Page 23 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

# Testing Requirements [326 IAC 2-7-6(1)]

# C.10 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

# Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

#### C.11 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

- (a) Has certified that all facilities at this source are in compliance with all applicable requirements; and
- (b) Has submitted a statement that the Permittee will continue to comply with such requirements: and
- (c) Will comply with such applicable requirements that become effective during the term of this permit.

#### C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

CMI-Wabash Cast, Inc.

Page 24 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### C.13 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

#### C.14 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed, according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

# C.15 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

#### Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

#### C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on November 17, 1997.
- (b) If the ERP is disapproved by IDEM, OAM the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (c) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (d) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (e) Upon direct notification by IDEM, OAM that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

#### C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

CMI-Wabash Cast, Inc.

Page 25 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

# (a) Submit:

- (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
- (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
- (3) A verification to IDEM, OAM when applicable) that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

# C.18 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
    - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

CMI-Wabash Cast, Inc.

Page 26 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
  - (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
  - (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

CMI-Wabash Cast, Inc.

Page 27 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

# Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

# C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
  - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.

# C.21 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

CMI-Wabash Cast, Inc.

Page 28 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### C.22 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C Compliance Monitoring Plan Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

# C.23 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

CMI-Wabash Cast, Inc.

Page 29 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### **Stratospheric Ozone Protection**

#### C.24 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

CMI-Wabash Cast, Inc.

Page 30 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### **SECTION D.1**

#### **FACILITY OPERATION CONDITIONS**

(1) One (1) melting and combustion operation (S-1) consisting of two (2) reverberatory furnaces each processing aluminum at a rate of 7.0 tons per hour, each rated at 39 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting to two (2) stacks (Stacks 2.41 and 2.42). The two reverberatory furnaces do not melt simultaneously.

# Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), and to CP 169-2533-00042 issued on December 10, 1992, the allowable particulate matter (PM) emission rate from the melting operations in the two (2) reverberatory furnaces shall not exceed 15.1 pounds per hour (66.1 tons per year) for each furnace when operating at a process weight of 7.0 tons per hour:

The pounds per hour limitation was calculated with the following equation:

E = 4.10 P  $^{0.67}$  where E = rate of emission in pounds per hour and P = process weight rate in tons per hour = 7.0 tons per hour

 $E = 4.10 (7.0)^{0.67}$ E = 15.1 pounds per hour (66.1 tons per year)

#### D.1.2 Stack Height

Pursuant to CP 169-2533-00042, issued December 10, 1992, the reverberatory furnace stacks must have a release height of 80 feet above the ground (35 feet above the roof), and be upward-pointing. They must not be equipped with rain caps.

#### **Compliance Determination Requirements**

# D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 24 and 36 months after issuance of this permit, the Permittee shall perform PM testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.1.4 Visible Emissions Notations

- (a) Daily visible emission notations of the reverberatory furnace stacks exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

CMI-Wabash Cast, Inc.

Page 31 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

# Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

# D.1.5 Record Keeping Requirements

- (a) To document compliance with Condition D.1.4, the Permittee shall maintain records of daily visible emission notations of the reverberatory furnaces facility stack exhaust.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

CMI-Wabash Cast, Inc.

Page 32 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### SECTION D.2

#### **FACILITY OPERATION CONDITIONS**

One (1) melting and combustion operation (S-2) consisting of one (1) prototype crucible furnace processing aluminum at a rate of 1.25 tons per hour, rated at 7 million (mm) British thermal units (Btu) per hour, combusting natural gas.

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

# D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable particulate matter (PM) emission rate from the prototype crucible furnace shall not exceed 4.76 pounds per hour (20.9 tons per year) when operating at a process weight of 1.25 tons per hour:

The pounds per hour limitation was calculated with the following equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour and P = process weight rate in tons per hour = 1.25 tons per hour

 $E = 4.10 (1.25)^{0.67}$ 

E = 4.76 pounds per hour (20.9 tons per year)

#### **Compliance Determination Requirements**

# D.2.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

# Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

# D.2.3 Visible Emissions Notations

- (a) Daily visible emission notations of the prototype crucible furnace stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

CMI-Wabash Cast, Inc.
Page 33 of 57
Wabash, Indiana
OP No. T169-6598-00042

Permit Reviewer: TE/EVP

# Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

# D.2.4 Record Keeping Requirements

- (a) To document compliance with Condition D.2.3, the Permittee shall maintain records of daily visible emission notations of the prototype crucible furnace facility stack exhaust.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

CMI-Wabash Cast, Inc.

Page 34 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### SECTION D.3 FACILITY OPERATION CONDITIONS

(3) One (1) mold making and sand reclamation operation (SC-1) processing a metal throughput of 11.39 tons per hour with a cyclone wet scrubber for particulate matter control and exhausting to one (1) stack (Stack 2.11).

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

# D.3.1 Volatile Organic Compounds [326 IAC 2-2]

The VOC emissions from the mold making and sand reclamation operation (SC-1) shall be limited to 16.7 tons per twelve (12) consecutive month period, therefore, the source is not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

# D.3.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable particulate matter (PM) emission rate from the mold making and sand reclamation operation (SC-1) shall not exceed 20.9 pounds per hour when operating at a process weight rate of 11.39 tons per hour.

The pounds per hour limitation was calculated with the following equation:

 $E = 4.10 \ P^{-0.67}$  where E =rate of emission in pounds per hour; and P =process weight rate in tons per hour = 11.39 tons per hour

 $E = 4.10 (11.39)^{0.67}$ 

E = 20.9 pounds per hour (91.6 tons per year)

# D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

# **Compliance Determination Requirements**

#### D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 24 and 36 months after issuance of this permit, the Permittee shall perform PM testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.3.5 Particulate Matter (PM)

The cyclone wet scrubber for PM control shall be in operation at all times when the mold making and sand reclamation facility is in operation and exhausting to the outside atmosphere.

#### D.3.6 Visible Emissions Notations

- (a) Daily visible emission notations of the mold making and sand reclamation stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

CMI-Wabash Cast, Inc.

Page 35 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

# D.3.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the cyclone wet scrubber and the liquid flow rate used in conjunction with the mold making and sand reclamation process, at least once daily when the mold making and sand reclamation process is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the cyclone wet scrubber shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test and the flow rate shall be maintained at no less than 50.0 gallons per minute or a flow rate established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading or flow rate is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM and shall be calibrated at least once every six (6) months.

#### D.3.8 Cyclone Wet Scrubber Inspections

An inspection shall be performed each calender quarter of the cyclone wet scrubber controlling the mold making and sand reclamation operation when venting to the atmosphere. A cyclone wet scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All leakage shall be repaired.

# D.3.9 Failure Detection

In the event that cyclone wet scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

# Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.3.10 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limit and/or the VOC emission limit established in Condition D.3.1.
  - (1) The amount and VOC content of each solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;
  - (2) A log of the dates of use;

CMI-Wabash Cast, Inc.

Page 36 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(3) The total VOC usage for each month; and

- (4) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.3.6, the Permittee shall maintain records of daily visible emission notations of the mold making and sand reclamation facility stack exhaust.
- (c) To document compliance with Condition D.3.7, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Liquid flow rate.
  - (2) Documentation of all response steps implemented, per event .
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures or its equivalent.
  - (5) Operator standard operating procedures (SOP) or its equivalent.
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

# D.3.11 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.1 shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

CMI-Wabash Cast, Inc.

Page 37 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### SECTION D.4 FACILITY OPERATION CONDITIONS

(4) One (1) shakeout and vibrating dump conveyor (SC-2) processing a metal throughput of 11.39 tons per hour with a cyclone wet scrubber for particulate matter control and exhausting to one (1) stack (Stack 2.12).

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.4.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable particulate matter (PM) emission rate from the shakeout and vibrating dump conveyor operation (SC-2) shall not exceed 20.9 pounds per hour when operating at a process weight rate of 11.39 tons per hour.

The pounds per hour limitation was calculated with the following equation:

 $E = 4.10 \ P^{-0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour = 11.39 tons per hour

 $E = 4.10 (11.39)^{0.67}$ 

E = 20.9 pounds per hour (91.6 tons per year)

#### D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

#### **Compliance Determination Requirements**

#### D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between 24 and 36 months after issuance of this permit, the Permittee shall perform PM testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.4.4 Particulate Matter (PM)

The cyclone wet scrubber for PM control shall be in operation at all times when the shakeout and vibrating dump conveyor is in operation and exhausting to the outside atmosphere.

#### D.4.5 Visible Emissions Notations

- (a) Daily visible emission notations of the shakeout and vibrating dump conveyor facility stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

CMI-Wabash Cast, Inc.

Page 38 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.4.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the cyclone wet scrubber and the liquid flow rate used in conjunction with the shakeout and vibrating dump conveyor process, at least once daily when the shakeout and vibrating dump conveyor process is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the cyclone wet scrubber shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test and the flow rate shall be maintained at no less than 50.0 gallons per minute or a flow rate established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading or flow rate is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM and shall be calibrated at least once every six (6) months.

#### D.4.7 Cyclone Wet Scrubber Inspections

An inspection shall be performed each calender quarter of the cyclone wet scrubber controlling the shakeout and vibrating dump conveyor when venting to the atmosphere. A cyclone wet scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All leakage shall be repaired.

#### D.4.8 Failure Detection

In the event that cyclone wet scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.4.9 Record Keeping Requirements

- (a) To document compliance with Condition D.4.5, the Permittee shall maintain records of daily visible emission notations of the shakeout and vibrating dump conveyor facility stack exhaust.
- (b) To document compliance with Condition D.4.6, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Liquid flow rate.
  - (2) Documentation of all response steps implemented, per event .

CMI-Wabash Cast, Inc.
Page 39 of 57
Wabash, Indiana
OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.

- (4) Quality Assurance/Quality Control (QA/QC) procedures or its equivalent.
- (5) Operator standard operating procedures (SOP) or its equivalent.
- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

CMI-Wabash Cast, Inc.

Page 40 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### SECTION D.5 FACILITY OPERATION CONDITIONS

(5) Six (6) old core machines (SC-3) each capable of producing a maximum of 6,300 pounds of cores per hour, with six (6) acid scrubbers for VOC control and exhausting to six (6) stacks (Stacks 1.11, 1.12, 1.14, 1.15, 1.16, and 1.17).

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.5.1 Volatile Organic Compounds (VOCs) [326 IAC 2-2]

The VOC emissions from the six (6) old core machines (SC-3) shall be limited to 30.0 tons per twelve (12) consecutive month period, therefore, the source is not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

#### **Compliance Determination Requirements**

#### D.5.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.5.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.5.3 Parametric Monitoring

The Permittee shall record the pH of the liquid in the six (6) acid scrubbers used in conjunction with the old core machines, at least once daily when the old core machines are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pH of the liquid shall be maintained at less than or equal to 5.0 standard units. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pH is greater than the above mentioned range for any one reading.

#### D.5.4 Acid Scrubber Inspections

An inspection shall be performed each calender quarter of the six (6) acid scrubbers controlling the six (6) old core machines when venting to the atmosphere. An acid scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All leakage shall be repaired.

#### D.5.5 Failure Detection

In the event that acid scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.5.6 Record Keeping Requirements

(a) To document compliance with Condition D.5.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limit and/or the VOC emission limit established in Condition D.5.1.

CMI-Wabash Cast, Inc.

Page 41 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(1) The amount and VOC content of each solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;

- (2) A log of the dates of use;
- (3) The total VOC usage for each month; and
- (4) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.5.3 the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation:
    - (A) pH of the liquid.
  - (2) Documentation of all response steps implemented, per event .
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures or its equivalent.
  - (5) Operator standard operating procedures (SOP) or its equivalent.
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

#### D.5.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.1 shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

CMI-Wabash Cast, Inc.

Page 42 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### **SECTION D.6**

(6)

#### **FACILITY OPERATION CONDITIONS**

One (1) knockout operation (BH-1), including a rotary sand separator with a baghouse for particulate matter control, exhausting to one (1) stack (Stack 2.21).

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.6.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable particulate matter (PM) emission rate from the knockout machines and the rotary sand separator (BH-1) shall not exceed 23.0 pounds per hour when operating at a process weight rate of 13.14 tons of sand per hour.

The pounds per hour limitation was calculated with the following equation:

 $E = 4.10 \ P^{-0.67}$  where E =rate of emission in pounds per hour; and P =process weight rate in tons per hour = 13.14 tons per hour

 $E = 4.10 (13.14)^{0.67}$ 

E = 23.0 pounds per hour (100.9 tons per year)

#### D.6.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

#### **Compliance Determination Requirements**

#### D.6.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.6.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.6.4 Particulate Matter (PM)

The baghouse for PM control shall be in operation at all times when the rotary sand separator is in operation.

#### D.6.5 Visible Emissions Notations

- (a) Daily visible emission notations of the knockout machines and the rotary sand separator stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

CMI-Wabash Cast, Inc.

Page 43 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.6.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the knockout and rotary sand separator process, at least once daily when the knockout and rotary sand separator process is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 0.5 and 5.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM and shall be calibrated at least once every six (6) months.

#### D.6.7 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the knockout operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.6.8 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

### Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.6.9 Record Keeping Requirements

- (a) To document compliance with Condition D.6.5, the Permittee shall maintain records of daily visible emission notations of the knockout machines and rotary sand separator stack exhaust.
- (b) To document compliance with Condition D.6.6, the Permittee shall maintain the following:

CMI-Wabash Cast, Inc.

Page 44 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(1) Daily records of the following operational parameters during normal operation:

- (A) Inlet and outlet differential static pressure.
- (2) Documentation of all response steps implemented, per event.
- (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
- (4) Quality Assurance/Quality Control (QA/QC) procedures or its equivalent.
- (5) Operator standard operating procedures (SOP) or its equivalent.
- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

CMI-Wabash Cast, Inc.

Page 45 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### SECTION D.7

#### **FACILITY OPERATION CONDITIONS**

(7) One (1) pouring operation (F-1) utilizing molten aluminum from the melting operations and a primary aluminum vendor for a process rate of 11.39 tons per hour.

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.7.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable particulate matter (PM) emission rate from the pouring operation (F-1) shall not exceed 20.9 pounds per hour when operating at a process weight rate of 11.39 tons per hour.

The pounds per hour limitation was calculated with the following equation:

 $E = 4.10 \ P^{-0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour = 11.39 tons per hour

 $E = 4.10 (11.39)^{0.67}$ E = 20.9 pounds per hour (91.6 tons per year)

#### **Compliance Determination Requirements**

#### D.7.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.7.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

CMI-Wabash Cast, Inc.

Page 46 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### **SECTION D.8**

#### **FACILITY OPERATION CONDITIONS**

(8) Two (2) core machines (SC-4) each capable of producing a maximum of 3,300 pounds of cores per hour, with one (1) acid scrubber for VOC control and exhausting to one (1) stack (Stack 1.18).

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.8.1 Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), the Best Available Control Technology (BACT) for the two (2) core machines will be the operation of the acid scrubber. The scrubber shall operate at an overall control efficiency of 90%.

#### D 8.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

#### **Compliance Determination Requirements**

#### D.8.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.8.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.8.4 Volatile Organic Compounds (VOCs)

The one (1) acid scrubber shall be in operation when the core machines are in operation and exhausting to the outside atmosphere.

#### D.8.5 Parametric Monitoring

The Permittee shall record the pH of the liquid in the acid scrubber used in conjunction with the core machines, at least once daily when the core machines are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pH of the liquid shall be maintained at less than or equal to 5.0 standard units. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pH is greater than the above mentioned range for any one reading.

#### D.8.6 Acid Scrubber Inspections

An inspection shall be performed each calender quarter of the one (1) acid scrubber controlling the two (2) core machines (SC-4) when venting to the atmosphere. An acid scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All leakage shall be repaired.

#### D.8.7 Failure Detection

In the event that acid scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Page 47 of 57 OP No. T169-6598-00042

Wabash, Indiana Permit Reviewer: TE/EVP

CMI-Wabash Cast. Inc.

#### Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.8.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.8.1 and D.8.5, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation:
    - (A) pH of the liquid in the scrubber.
  - (2) Documentation of all response steps implemented, per event .
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures or its equivalent.
  - (5) Operator standard operating procedures (SOP) or its equivalent.
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

CMI-Wabash Cast, Inc.

Page 48 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### **SECTION D.9**

(9)

#### **FACILITY OPERATION CONDITIONS**

One (1) manual prototype core making operation (SC-5) with a maximum capacity of processing 200 pounds of sand per hour, having no emission control equipment or external stack or vent.

#### **Compliance Determination Requirements**

#### D.9.1 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.9.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

CMI-Wabash Cast, Inc.

Page 49 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### **SECTION D.10**

#### **FACILITY OPERATION CONDITIONS**

(10) One (1) mechanical blasting operation (BH-3) with a process rate of 32.7 tons per hour that is a combination of the steel shot throw rate (27 tons per hour) and the aluminum casting throughput (5.7 tons per hour), with a dust collector for particulate control.

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.10.1 Particulate Matter (PM) [326 IAC 6-3] [326 IAC 2-2]

- (a) Emissions of PM shall be limited to 5.5 pounds per hour (24 tons per year) to avoid the requirements of 326 IAC 2-2 (PSD).
- (b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable particulate matter (PM) emission rate from the blasting operation (BH-3) shall not exceed 40.7 pounds per hour when operating at a process weight rate of 32.7 tons per hour.

The pounds per hour limitation was calculated with the following equation:

 $E = 55.0 \ P^{-0.11}$ -40 where E =rate of emission in pounds per hour; and P =process weight rate in tons per hour = 32.7 tons per hour

 $E = 55.0 (32.7)^{0.11} - 40$ 

E = 40.7 pounds per hour (178.3 tons per year)

Since the PM emissions are limited to 5.5 pounds per hour to avoid the requirements of 326 IAC 2-2 (PSD), this limit will also satisfy the requirements of 326 IAC 6-3-2.

#### D.10.2 Particulate Matter 10 [326 IAC 2-2]

Allowable PM10 emissions shall not exceed 3.2 pounds per hour (14 tons per year). This limit shall render the requirements of 326 IAC 2-2 (PSD) not applicable.

#### D.10.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

#### **Compliance Determination Requirements**

#### D.10.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM and PM-10 limits specified in Conditions D.10.1 and D.10.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.10.5 Particulate Matter (PM)

The dust collector for PM control shall be in operation at all times when the blasting operation is in operation and exhausting to the outside atmosphere.

CMI-Wabash Cast, Inc.

Page 50 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### D.10.6 Visible Emissions Notations

(a) Daily visible emission notations of the blasting operation stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.10.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collector used in conjunction with the blasting process, at least once daily when the blasting process is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 0.5 and 5.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM and shall be calibrated at least once every six (6) months.

#### D.10.8 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the mechanical blasting operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.10.9 Broken or Failed Bag Detection

In the event that bag failure has been observed.

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

CMI-Wabash Cast, Inc.

Page 51 of 57
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.10.10 Record Keeping Requirements

- (a) To document compliance with Condition D.10.5, the Permittee shall maintain records of daily visible emission notations of the blasting operation stack exhaust.
- (b) To document compliance with Condition D.10.6, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation:
    - (A) Inlet and outlet differential static pressure.
  - (2) Documentation of all response steps implemented, per event.
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures or its equivalent.
  - (5) Operator standard operating procedures (SOP) or its equivalent.
  - (6) Manufacturer's specifications or its equivalent.
  - (7) Equipment "troubleshooting" contingency plan.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

Page 52 of 57 CMI-Wabash Cast, Inc. Wabash, Indiana OP No. T169-6598-00042

Permit Reviewer: TE/EVP

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION**

### **PART 70 OPERATING PERMIT CERTIFICATION**

Source Name: CMI-Wabash Cast, Inc.

3837 West Mill Street Extended, Wabash, IN 46992 Source Address: 3837 West Mill Street Extended, Wabash, IN 46992 Mailing Address:

Part 70 Permit No.: T169-6598-00042
This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.
Please check what document is being certified:
9 Annual Compliance Certification Letter
9 Test Result (specify)
9 Report (specify)
9 Notification (specify)
9 Other (specify)
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Date:

Page 53 of 57 CMI-Wabash Cast, Inc. OP No. T169-6598-00042 Wabash, Indiana

Permit Reviewer: TE/EVP

### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR MANAGEMENT**

**COMPLIANCE DATA SECTION** P.O. Box 6015 100 North Senate Avenue Indianapolis, Indiana 46206-6015 Phone: 317-233-5674 Fax: 317-233-5967

#### **PART 70 OPERATING PERMIT EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: CMI-Wabash Cast, Inc.

If any of the following are not applicable, mark N/A

Source Address: 3837 West Mill Street Extended, Wabash, IN 46992 Mailing Address: 3837 West Mill Street Extended, Wabash, IN 46992

Part 70 Permit No.: T169-6598-00042

This	form	consists	of	2	pages
------	------	----------	----	---	-------

Dogg 1 of 2

inis to	orm con	sists of 2 pages	Page 1 of 2
Check	k either	No. 1 or No.2	
9 1.	This C	is an emergency as defined in 326 IAC 2-7-1(12)  The Permittee must notify the Office of Air Manag hours (1-800-451-6027 or 317-233-5674, ask for 0 The Permittee must submit notice in writing or by (Facsimile Number: 317-233-5967), and follow the	Compliance Section); and facsimile within two (2) days
<b>9</b> 2.	This	is a deviation, reportable per 326 IAC 2-7-5(3)(c) The Permittee must submit notice in writing withir	n ten ( <b>10</b> ) calendar days

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

Page 54 of 57 OP No. T169-6598-00042

If any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency/Deviation started:	
Date/Time Emergency/Deviation was corrected:	
Was the facility being properly operated at the time of the emergency/deviation? Y Describe:	N
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency/deviation:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are necessary imminent injury to persons, severe damage to equipment, substantial loss of capital involved or raw materials of substantial economic value:	
Form Completed by: Title / Position: Date: Phone:	

Page 55 of 57 OP No. T169-6598-00042

CMI-Wabash Cast, Inc. Wabash, Indiana Permit Reviewer: TE/EVP

Phone:

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

# Part 70 Quarterly Report

Source Name: Source Address: Mailing Address: Part 70 Permit No.: Facility: Parameter: Limit:	ource Address: 3837 West Mill Street Extended, Wabash, IN 46992 ailing Address: 3837 West Mill Street Extended, Wabash, IN 46992 art 70 Permit No.: T169-6598-00042 acility: mold making and sand reclamation operation (SC-1) volatile Organic Compounds				
	Column 1	Column 2	Column 1 + Column 2		
Month	VOC Emissions This Month	VOC Emissions Previous 11 Months	12 Month Total VOC Emissions		
9	No deviation occurred in Deviation/s occurred in to Deviation has been repo	his quarter.			
Title	/ Position:				

Page 56 of 57 OP No. T169-6598-00042

CMI-Wabash Cast, Inc. Wabash, Indiana Permit Reviewer: TE/EVP

Phone:

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

## **Part 70 Quarterly Report**

Source Name: Source Address: Mailing Address: Part 70 Permit No.: Facility: Parameter: Limit:	3837 West Mill Street E: T169-6598-00042 six (6) old core machine Volatile Organic Compor The VOC emissions from tons per twelve (12) cons	unds m the six (6) old core machines	(SC-3) shall be limited to 30.0
	Column 1	Column 2	Column 1 + Column 2
Month	VOC Emissions This Month	VOC Emissions Previous 11 Months	12 Month Total VOC Emissions
9	No deviation occurred in to Deviation has been repo	·	
Title	e / Position: nature:		

 CMI-Wabash Cast, Inc.
 Page 57 of 57

 Wabash, Indiana
 OP No. T169-6598-00042

Permit Reviewer: TE/EVP

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

# PART 70 OPERATING PERMIT QUARTERLY COMPLIANCE MONITORING REPORT

Source Name: Source Address: Mailing Address: Part 70 Permit No.:		reet Exte	nded, Wabash, IN 46992 nded, Wabash, IN 46992	
	Months:	to _	Year:	
this permit. This re requirements and the necessary. This fo	eport shall be submined the date(s) of each or me can be supplement.	itted quar deviation ented by	met all the compliance moniton terly. Any deviation from the comust be reported. Additional pattaching the Emergency/Devious marked "No deviations occ	compliance monitoring pages may be attached if ation Occurrence Report.
9 NO DEVIATIONS	S OCCURRED THIS	S REPOR	TING PERIOD	
9 THE FOLLOWIN	IG DEVIATIONS O	CCURRE	THIS REPORTING PERIOD.	
-	onitoring Requirent to Condition D.1.3)	ment	Number of Deviations	Date of each Deviation
	<b>-</b> .			

Attach a signed certification to complete this report.

# Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Part 70 Operating Permit and Enhanced New Source Review (ENSR)

#### **Source Background and Description**

Source Name: CMI-Wabash Cast, Inc.

Source Location: 3837 West Mill Street Extended, Wabash, IN 46992

County: Wabash SIC Code: 3365

Operation Permit No.: T169-6598-00042
Permit Reviewer: Trish Earls/EVP

The Office of Air Management (OAM) has reviewed a Part 70 permit application from CMI-Wabash Cast, Inc. relating to the operation of an aluminum foundry operation producing automobile engine castings.

#### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (1) One (1) melting and combustion operation (S-1) consisting of two (2) reverberatory furnaces each processing aluminum at a rate of 7.0 tons per hour, each rated at 39 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting to two (2) stacks (Stacks 2.41 and 2.42). Note: the two furnaces do not melt simultaneously;
- One (1) melting and combustion operation (S-2) consisting of one (1) prototype melting/holding furnace processing aluminum at a rate of 1.25 tons per hour, rated at 7 million (mm) British thermal units (Btu) per hour, combusting natural gas;
- One (1) mold making and sand reclamation operation (SC-1) processing a metal throughput of 11.39 tons per hour with a cyclone wet scrubber for particulate matter control and exhausting to one (1) stack (Stack 2.11);
- (4) One (1) shakeout and vibrating dump conveyor (SC-2) processing a metal throughput of 11.39 tons per hour with a cyclone wet scrubber for particulate matter control and exhausting to one (1) stack (Stack 2.12);
- (5) Six (6) old core machines (SC-3) each capable of producing a maximum of 5,731 pounds of cores per hour, with six (6) acid scrubbers for VOC control and exhausting to six (6) stacks (Stacks 1.11, 1.12, 1.14, 1.15, 1.16, and 1.17);
- (6) One (1) knockout operation (BH-1), including a rotary sand separator with a baghouse for particulate matter control, exhausting to one (1) stack (Stack 2.21);

(7) One (1) pouring operation (F-1) utilizing molten aluminum from the melting operations and a primary aluminum vendor for a process rate of 11.39 tons per hour.

#### **Unpermitted Emission Units and Pollution Control Equipment**

The source also consists of the following unpermitted facilities/units:

- (1) Two (2) core machines (SC-4) each capable of producing a maximum of 3,002 pounds of cores per hour, with one (1) acid scrubber for VOC control and exhausting to one (1) stack (Stack 1.18);
- (2) One (1) manual prototype core making operation (SC-5) with a maximum capacity of processing 200 pounds of sand per hour, having no emission control equipment or external stack or vent; and
- (3) One (1) mechanical blasting operation (BH-3) with a process rate of 32.7 tons per hour that is a combination of the steel shot throw rate (27 tons per hour) and the aluminum casting throughput (5.7 tons per hour), with a dust collector for particulate matter control.

#### Emission Units and Pollution Control Equipment Under Enhanced New Source Review (ENSR)

All unpermitted emission units will be reviewed under the ENSR process.

#### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate of less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive lasting; pneumatic conveying; and woodworking operations:
  - (a) Twelve (12) liquid cooled saws (BH-2) with no air pollution control equipment;
  - (b) Twelve (12) dry grinders (BH-2) with two (2) dust collectors for particulate matter control;
  - (c) Goff Blast # 1 with one (1) dust collector for particulate matter control, with a gas flow rate of 2,000 acfm and a design grain loading of less than 0.03 dscf;
  - (d) Goff Blast # 2 with one (1) dust collector for particulate matter control, with a gas flow rate of 3,700 acfm and a design grain loading of less than 0.03 dscf;
  - (e) Goff Blast # 3 with one (1) dust collector for particulate matter control, with a gas flow rate of 3,700 acfm and a design grain loading of less than 0.03 dscf;
- (2) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million British thermal units (Btu) per hour (F-6):
  - (a) Nine (9) air make-up units rated at five (5) million Btu per hour
  - (b) One (1) sand dryer rated at four (4) million Btu per hour;
- (3) Paved and unpaved roads and parking lots with public access (F-7):

- (4) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment;
- (5) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons;
  - (a) One (1) 300 gallon gasoline tank
- (6) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6;
- (7) Cleaners and solvents characterized as follows:
  - (a) having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or;
  - (b) having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20 degrees C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months; and
- (8) Machining where an aqueous cutting coolant continuously floods the machining interface:
  - (a) Four (4) liquid cooled machine lines and machine washing operations (F-5); and
- (9) Ten (10) knockout hammers with particulate matter emissions less than 5 pounds per hour or 25 pounds per day.

#### **Existing Approvals**

The source has been operating under the following approvals:

- (1) CP-169-2533-00042, issued on November 20, 1992.
- (2) Registration issued on September 8, 1982.
- (3) Operation Permit number 85-09-82-0109, issued on August 24, 1978.

#### **Enforcement Issue**

- (a) IDEM is aware that the following equipment has been constructed and operated prior to receipt of the proper permit:
  - (1) Two (2) core machines (SC-4) each capable of producing a maximum of 3,002 pounds of cores per hour, with one (1) acid scrubber for VOC control and exhausting to one (1) stack (Stack 1.18);
  - (2) One (1) manual prototype core making operation (SC-5) with a maximum capacity of processing 200 pounds of sand per hour, having no emission control equipment or external stack or vent; and

- (3) One (1) mechanical blasting operation (BH-3) with a process rate of 32.7 tons per hour that is a combination of the steel shot throw rate (27 tons per hour) and the aluminum casting throughput (5.7 tons per hour), with a dust collector for particulate matter control.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

#### Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on September 17, 1996. Additional information was received on February 5, 1997 and November 26, 1997.

A notice of completeness letter was mailed to CMI - Wabash Cast, Inc. on October 29, 1996.

#### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (six (6) pages).

#### **Potential Emissions**

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as "emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility."

Pollutant	Potential Emissions (tons/year)
PM	greater than 250
PM-10	greater than 250
SO <sub>2</sub>	less than 100
VOC	greater than 250
CO	less than 100
NO <sub>x</sub>	greater than 100 but less than 250

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Manganese	less than 10
Chromium	less than 10
Nickel	less than 10
Formaldehyde	less than 10
Naphthalene	less than 10
Biphenyl	less than 10
Phenol	greater than 10
MDI	less than 10
Acrolein	less than 10
Benzene	greater than 10
Hydrogen Cyanide	less than 10
Xylenes	less than 10
Toluene	less than 10
Total Aromatic Amines	less than 10
Total C2 to C5 Aldehydes	less than 10
Trichloroethylene	greater than 10
Triethylamine	greater than 10
Perchloroethylene	less than 10
TOTAL	greater than 25

- (a) The potential emissions (as defined in the Indiana Rule) of particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM-10), volatile organic compounds (VOC), and nitrogen oxides  $(NO_X)$  are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential emissions (as defined in Indiana Rule) of any single HAP is equal to or greater than ten (10) tons per year and/or the potential emissions (as defined in Indiana Rule) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

#### **Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the OAM 1996 emission data.

Pollutant	Actual Emissions (tons/year)
PM	14.70
PM-10	12.96
SO <sub>2</sub>	6.67
VOC	23.55
CO	2.92
NO <sub>X</sub>	17.81
MDI	0.003
Acrolein	0.006
Xylenes	0.12
Toluene	0.17
Phenol	1.05
Triethylamine	3.02
Perchloroethylene	0.005
Formaldehyde	0.33
Methyl Chloroform	4.76
Naphthalene	0.26
Biphenyl	0.13
Benzene	1.12
Chromium compounds	0.001
Manganese compounds	0.001
Nickel compounds	0.001
Aldehydes	0.05
Aromatics	0.07

#### **Limited Potential to Emit**

The table below summarizes the total limited potential to emit of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/ facility	PM	PM-10	SO <sub>2</sub>	VOC	СО	NO <sub>X</sub>	HAPs
Mold Making & Sand Recl. (SC-1)	12.2	11.2	0.0	16.7	0.0	0.0	0.0
Old Core Machines (SC-3)	0.0	0.0	0.0	30.0	0.0	0.0	2.7
Core Machines (SC-4)	0.0	0.0	0.0	21.0	0.0	0.0	18.0
Shot blasting (BH-3)	24.0	14.0	0.0	0.0	0.0	0.0	0.0
Total Emissions*	50.2	42.8	33.9	133.0	17.1	100.4	23.2

The volatile organic compound (VOC) emissions from the mold making and sand reclamation operation (SC-1) and from the old core machines (SC-3) shall be limited to 16.7 and 30.0 tons per year, respectively, to avoid the requirements of 326 IAC 2-2 (PSD). The particulate matter emissions from the shot blasting operations shall be limited to below the significant thresholds for a major modification to a major PSD source.

\* Total Emissions represent total source wide emissions including insignificant activities.

#### **County Attainment Status**

The source is located in Wabash County.

Pollutant	Status
TSP	attainment
PM-10	attainment
SO <sub>2</sub>	attainment
$NO_2$	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation of ozone. Therefore, VOC and  $NO_{\chi}$  emissions are considered when evaluating the rule applicability relating to the ozone standards. Wabash County has been designated as attainment or unclassifiable for ozone.

#### **Part 70 Permit Conditions**

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (1) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (2) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

#### **Federal Rule Applicability**

- (a) This source is not subject to the requirements of the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR 60.191, Subpart S (Primary Aluminum Reduction), because the source does not perform primary aluminum reduction as defined in 40 CFR 60.191. This source is a secondary aluminum foundry plant, therefore the requirements under 326 IAC 12, (40 CFR 60.191, Subpart S) do not apply.
- (b) There are currently no National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR Part 63) applicable to this source.

#### State Rule Applicability - Entire Source

#### 326 IAC 2-2 (Prevention of Significant Deterioration)

- a) This source is not subject to the requirements of 326 IAC 2-2 (PSD). To avoid the requirements of 326 IAC 2-2, the potential VOC emissions from the mold making and sand reclamation operation (SC-1), constructed in 1978, shall be limited to 16.7 tons per year, and the potential VOC emissions from the old core machines (SC-3), constructed in 1978, shall be limited to 30.0 tons per year, such that potential VOC emissions from the original equipment at the source in 1978 are limited to 99 tons per year, making the source a minor PSD source in 1978. Therefore, the installation of the reverberatory melting and combustion operation (S-1) and the prototype reverberatory melting and combustion operation (S-2) in 1993, qualifies as a minor modification to an existing minor PSD source.
- b) Controlled VOC emissions from the core machines (SC-4), constructed in 1994, are less than 39.0 tons per year, therefore, the installation of the new core machines (SC-4) in 1994 was a minor modification to an existing major source.
- c) Potential PM and PM<sub>10</sub> emissions from the shot blasting operation (BH-3), constructed in 1995, are limited to 24.0 and 14.0 tons per year, respectively. Therefore, the installation of the shot blasting operation (BH-3) in 1995 was a minor modification to an existing major source.

Although the source is now a major PSD source, all of the above mentioned modifications to the source were minor PSD modifications and the requirements of 326 IAC 2-2 (PSD) do not apply.

#### 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM,  $PM_{10}$ , VOC, and  $NO_{\chi}$ . Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirements as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

#### 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

#### 326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2 (1), (2), or (3).

#### State Rule Applicability - Individual Facilities

#### 326 IAC 2-1-3.4 (New Source Toxics Control)

326 IAC 2-1-3.4 applies to new or reconstructed facilities with potential emissions of any single HAP equal or greater than ten (10) tons per year and potential emissions of a combination of HAPs greater than or equal to twenty-five (25) tons per year. The rule does not apply to facilities that have been constructed before the effective date of this rule (July 27, 1997). Since all of the facilities at this source have been constructed and/or permitted prior to July 27, 1997, the requirements of 326 IAC 2-1-3.4 do not apply.

#### 326 IAC 6-3-2 (Process Operations)

Pursuant to CP 169-2533-00042 issued on December 10, 1992, the particulate matter (PM) emissions from melting operations from the two (2) reverberatory furnaces (S-1) shall be limited to 15.1 pounds per hour (66.1 tons per year) for each furnace. This emission limit is based on a process weight rate of 7.0 tons per hour and the following equation:

```
E = 4.10 P ^{0.67} where E = rate of emission in pounds per hour and P = process weight rate in tons per hour = 7.0 tons per hour
```

 $E = 4.10 (7.0)^{0.67}$ E = 15.1 pounds per hour (66.1 tons per year)

Based on stack testing data, the maximum uncontrolled particulate matter emissions from the melting operations are 5.5 tons per year, therefore, the two (2) reverberatory furnaces will comply with 326 IAC 6-3-2. The two reverberatory furnaces do not melt simultaneously.

The PM emissions from the melting operation from the prototype melting/holding furnace (S-2) shall be limited to 4.76 pounds per hour (20.9 tons per year). This emission limit is based on a process weight rate of 1.25 tons per hour and the following equation:

```
E = 4.10 P ^{0.67} where E = rate of emission in pounds per hour and P = process weight rate in tons per hour = 1.25 tons per hour
```

 $E = 4.10 (1.25)^{0.67}$ E = 4.76 pounds per hour (20.9 tons per year)

Based on stack testing data, the maximum uncontrolled particulate matter emissions from the melting operation are 0.99 tons per year, therefore, the prototype melting/holding furnace will comply with 326 IAC 6-3-2.

The PM emissions from the mold making and sand reclamation (SC-1), the shakeout operation (SC-2), and the pouring operation (F-1) shall be limited to 20.9 pounds per hour (91.6 tons per year) for each unit. This emission limit is based on a process weight rate of 11.39 tons per hour for each unit and the following equation:

 $E = 4.10 \ P^{0.67}$  where E = rate of emission in pounds per hour and P = process weight rate in tons per hour  $= 11.39 \ tons$  per hour

```
E = 4.10 (11.39)^{0.67}

E = 20.9 pounds per hour (91.6 tons per year)
```

Potential PM emissions after control (wet scrubber) from the mold making and sand reclamation operation and the shakeout operation are each 12.2 tons per year, therefore, these units will comply with 326 IAC 6-3-2. Based on the emission factor from FIRE Version 5.0 for pouring operations, the maximum uncontrolled particulate matter emissions are negligible. Therefore, the pouring operation will comply with 326 IAC 6-3-2.

The PM emissions from the knockout operation (BH-1) shall be limited to 23.0 pounds per hour (100.9 tons per year). This emission limit is based on a process weight rate of 13.14 tons per hour and the following equation:

```
E = 4.10 P ^{0.67} where E = rate of emission in pounds per hour and P = process weight rate in tons per hour = 13.14 tons per hour

E = 4.10 (13.14) ^{0.67} E = 23.0 pounds per hour (100.9 tons per year)
```

Potential PM emissions after control (baghouse) from the knockout operation are 1.53 tons per year, therefore, the knockout operation will comply with 326 IAC 6-3-2.

The PM emissions from the twelve (12) dry grinders (BH-2) and the machining operation (F-5) shall be limited to 13.2 pounds per hour (57.6 tons per year) for each operation. This emission limit is based on a process weight rate of 5.7 tons per hour for each operation and the following equation:

```
E = 4.10 P ^{0.67} where E = rate of emission in pounds per hour and P = process weight rate in tons per hour = 5.7 tons per hour

E = 4.10 (5.7) ^{0.67}
E = 13.2 pounds per hour (57.6 tons per year)
```

Potential PM emissions after control (dust collector) from the twelve (12) dry grinders are 0.42 tons per year, therefore, the grinding operation will comply with 326 IAC 6-3-2. The particulate matter emissions from the machining unit are negligible and therefore, the machining operation will comply with 326 IAC 6-3-2.

The PM emissions from the shot blasting operation (BH-3) shall be limited to 40.7 pounds per hour (178.3 tons per year). This emission limit is based on a process weight rate of 32.7 tons per hour and the following equation:

```
E = 55.0 P ^{0.11} - 40 where E = rate of emission in pounds per hour and P = process weight rate in tons per hour = 32.7 tons per hour

E = 55.0 (32.7) ^{0.11} - 40 E = 40.7 pounds per hour (178.3 tons per year)
```

The PM emissions from the shot blasting operation are limited to 24 tons per year (5.5 lbs/hr) and the  $PM_{10}$  emissions are limited to 14 tons per year to avoid the requirements of 326 IAC 2-2 (PSD). Therefore, since the limited PM emissions are less than the allowable PM emissions pursuant to 326 IAC 6-3-2, the limit will satisfy the requirements of 326 IAC 6-3-2. PM emissions after control (baghouse) from the shot blasting operation are 0.95 tons per year, therefore, the shot blasting operation will comply with the limits to avoid 326 IAC 2-2 and with the requirements of 326 IAC 6-3-2.

#### 326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

326 IAC 8-1-6 applies to new facilities which have potential emissions of 25 tons or more per year of VOC. The prototype melting/holding furnace (S-2), the knockout operation (BH-1), mold making and sand reclamation operation (SC-1), the shakeout operation (SC-2), and the old core machines (SC-3) were all constructed prior to January 1, 1980, therefore, they are not subject to the requirements of 326 IAC 8-1-6. The potential VOC emissions from the melting and combustion operations (S-1), the prototype core machine (SC-5), the shot blasting operation (BH-3), the pouring operation (F-1), the machining lines (F-5), and the combustion units (F-6) are each below the twenty-five (25) tons per year applicability threshold and, therefore, are not subject to the requirements of 326 IAC 8-1-6.

The two (2) core machines (SC-4) constructed after January 1, 1980 have an uncontrolled potential to emit greater than 25 tons per year of VOC. However, triethylamine (TEA) emissions from each of these existing facilities are controlled by an acid scrubber which has a minimum overall control efficiency of 90% including capture and removal efficiency. Since the TEA emissions comprise approximately 74% of the total VOC emissions from the core machines, the control of TEA emissions is equivalent to a 67% reduction of total VOC emissions. Therefore, the OAM has determined that the use of the acid scrubber to control VOC emissions satisfies the requirements of 326 IAC 8-1-6. Therefore, the following has been determined to be BACT for the two (2) core machines (SC-4):

- a) Use of the acid scrubber to control TEA emissions from both core machines; and
- b) The pH of the liquid in the acid scrubber shall be maintained at 5.0 standard units.

#### 326 IAC 8-6 (Organic Solvent Emission Limitations)

Pursuant to 326 IAC 8-6-1, this rule applies to existing sources as of January 1, 1980, located in Lake and Marion Counties, and sources commencing operation after October 7, 1974 and prior to January 1, 1980 located anywhere in the state with potential VOC emissions of 100 tons per year. None of the facilities at this source are subject to the requirements of 326 IAC 8-6 as the VOC emissions from all organic solvents does not equal or exceed 100 tons per year.

#### 326 IAC 9-1 (Carbon Monoxide Emission Rules)

Pursuant to 326 IAC 9-1, this rules applies to all stationary sources of carbon monoxide emissions commencing operation after March 21, 1972 that have a capacity of ten (10) tons per hour for smelting furnaces. Specifically, the regulation applies to petroleum refining emissions, ferrous metal smelters, and refuse incineration and burning equipment sources. This source is not one of the above mentioned sources, and therefore, is not subject to the requirements of 326 IAC 9-1.

326 IAC 11-1 (Emission Limitations for Specific Type of Operations)

Pursuant to 326 IAC 11-1-1, emission limitations are established for particulate matter from foundries. Particulate emissions from all foundries in operation on or before December 6, 1968 shall comply with the requirements set forth in section 2 of this rule and shall comply with 326 IAC 6-3. All of the sources at this source are subject to the requirements of 326 IAC 11-1-1 as the source commenced operation after 1968. All of the sources are in compliance with 326 IAC 2 and 326 IAC 6-3 and are therefore in compliance with the requirements of 326 IAC 11-1.

#### **Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in permit Section D are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in permit Section D. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

The Mold Making and Sand Reclamation operations (SC-1) and the Shakeout operations (SC-2) have applicable compliance monitoring conditions as specified below:

- (a) VOC emissions from the mold making and sand reclamation operations (SC-1) shall be limited to 1.4 tons per month.
- (b) A quarterly summary shall be submitted to OAM Compliance Section. These reports shall included total monthly VOC usage for the mold making and sand reclamation operations (SC-1).
- (c) The Permittee shall record the total static pressure drop across each of the wet cyclone scrubbers controlling the mold making and sand reclamation operations (SC-1) and the shakeout operations (SC-2) at least once daily when the units are in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across each of the wet cyclone scrubbers shall be maintained within the range of 2.0 to 8.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.
- (d) Daily inspection shall record the flow rate to ensure that the rate may not drop below 50 gallons per minute.

(e) Daily inspections shall be performed for visible leakage.

These monitoring conditions are necessary to avoid the requirements of 326 IAC 2-2 (PSD), and because the wet cyclone scrubbers controlling PM emissions from the mold making and sand reclamation operations (SC-1), and shakeout operations (SC-2) must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

The Old and New Core Machine operations (SC-3, SC-4, and SC-5) have applicable compliance monitoring conditions as specified below:

- (a) VOC emissions from the old core machines (SC-3) shall be limited to 2.5 tons per month.
- (b) Quarterly summaries shall be submitted to OAM Compliance Section. These reports shall included total monthly VOC usage for the old core machines (SC-3).
- (c) Daily inspections shall be performed on each of six (6) wet acid scrubbers controlling the old core machines (SC-3) and the one (1) wet acid scrubber controlling the new core machines (SC-4 and SC-5) to monitor the pH of the liquid to ensure that the pH of the liquid in the acid scrubber does not exceed 4.5 standard units.
- (d) Daily inspections shall be performed for visible leakage.

These monitoring conditions are necessary to avoid the requirements of 326 IAC 2-2 (PSD) and because the six (6) wet acid scrubbers controlling PM emissions from the old core machines and the wet acid scrubber controlling PM emissions from the new core machines must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

The Knockout (BH-1), Sawing and Grinding (BH-2), and Shot Blasting (BH-3) operations have applicable compliance monitoring conditions as specified below:

- (a) Daily visible emissions notations of the knockout (BH-1), sawing and grinding (BH-2), and shot blasting (BH-3) exhaust stacks shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.
- (b) The Permittee shall record the total static pressure drop across each of the baghouses controlling the knockout operation, the twelve (12) dry grinders, and the shot blasting operation, at least once daily when the systems are in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across each of the baghouses shall be maintained within the range of 0.5 to 5.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading.

(c) Daily inspections shall be performed for visible leakage.

These monitoring conditions are necessary because the knockout, sawing and grinding, and shot blasting operations must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70) and to avoid the requirements of 326 IAC 2-2 (PSD).

#### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

(a) This proposed new source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the Clean Air Act. The concentrations of these air toxics were modeled and found to be (in worst case possible) as follows: The concentrations of these air toxics were compared to the Permissible Exposure Limits (PEL) developed by the Occupational Safety and Health Administration (OSHA). The Office of Air Management (OAM) does not have at this time any specific statutory or regulatory authority over these substances.

Air Toxics Analysis

		All Toxios Allai	7010			
Pollutant	Rate (lb/hr)	Rate @ 8,760 hr/yr (ton/yr)	Modeled Concentration (Fg/m³)	OSHA PEL (Fg/m³)	% OSHA PEL	
Formaldehyde	0.038	0.166	1212	1,200	0.48	
Naphthalene	0.069	0.301	1212	50,000	0.02	
Biphenyl	0.035	0.151	1212	1,000	0.53	
MDI	0.001	0.005	1212	200	0.09	
Triethylamine	10.6	46.4	1212	40,000	4.04	

Methodology:

Rate ton/yr = (rate lb/hr)\*(hr/yr of operation)\*(ton/2000 lbs)

#### Conclusion

The operation of this aluminum foundry shall be subject to the conditions of the attached proposed **Part 70 Permit No. T169-6598-00042.** 

33.9 100.3 537.9

320.9

313.3

#### Appendix A: Emission Calculations Summary

Company Name: CMI-Wabash Cast. Inc.

Address City IN Zip: 3837 West Mill Street Extended, Wabash IN 46992

CP: T169-6598 Plt ID: 169-00042 Reviewer: Trish Earls Date: November 26, 1997

	Uncontrolled Potential Emissions (tons/year)														
						Emissions Ge	enerating Activity								
Pollutant	Melting and	Prototype Melting and	Mold Making and	Shakeout and Vibrating	Old Core	Core	Prototype Core		Sawing and	Shot			Combustion		TOTAL
	Combustion (S-1)	Combustion (S-2)	Sand Reclamation (SC-1)	Dump Conveyor (SC-2)	Machines (SC-3)	Machines (SC-4)	Machines (SC-5)	Knockout (BH-1)	Grinding (BH-2)	Blasting (BH-3)	Pouring (F-1)	Machining (F-5)	Units (F-6)	Roadways (F-7)	
PM	10.32	10.76	174.60	174.60	0.00	0.00	0.00	1,530.90	424.40	946.10	0.00	0.00	2.60	17.10	3,291.4
PM10	8.11	9.67	160.60	130.20	0.00	0.00	0.00	1,530.90	42.40	709.60	0.00	0.00	2.60	17.10	2,611.2
802	27.80	4.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.13	0.00	33.9
NOx	71.10	7.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	21.50	0.00	100.3
110.0															

0.00

47.00

46.40

Total emissions based on rated capacity at 8,760 hours/year

12.00

0.03

0.01

CO

total HAPs

worst case single HAP

#### Controlled Potential Emissions (tons/year)

0.00

0.15

0.05

0.00

2.36

1.44

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

4.50

0.00

0.00

0.00

0.00

0.00

Emissions Generating Activity															
Pollutant	Melting and	Prototype Melting and	Mold Making and	Shakeout and Vibrating	Old Core	Core	Prototype Core		Sawing and	Shot			Combustion		TOTAL
	Combustion (S-1)	Combustion (S-2)	Sand Reclamation (SC-1)	Dump Conveyor (SC-2)	Machines (SC-3)	Machines (SC-4)	Machines (SC-5)	Knockout (BH-1)	Grinding (BH-2)	Blasting (BH-3)	Pouring (F-1)	Machining (F-5)	Units (F-6)	Roadways (F-7)	
PM	10.32	10.76	12.22	12.22	0.00	0.00	0.00	1.53	0.42	0.95	0.00	0.00	2.60	8.55	59.6
PM10	8.11	9.67	11.24	9.11	0.00	0.00	0.00	1.53	0.04	0.71	0.00	0.00	2.60	8.55	51.6
SO2	27.80	4.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.13	0.00	33.9
NOx	71.10	7.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	21.50	0.00	100.3
voc	7.10	0.18	16.70	23.45	30.00	20.99	2.53	18.99	0.31	0.00	6.98	3.43	1.24	0.00	131.9
co	12.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.50	0.00	17.1
total HAPs	0.03	0.00	0.00	0.00	2.71	5.24	0.15	2.36	0.00	0.00	0.00	0.00	0.00	0.00	10.5
worst case single HAP	0.01	0.00	0.00	0.00	2.24	4.64	0.05	1.44	0.00	0.00	0.00	0.00	0.00	0.00	8.4
													_		

Total emissions based on rated capacity at 8,760 hours/year, after control.

Notes:

1. Particulate matter (PM) emission data from the melting and combustion operation (S-1) are based on stack testing data. All other emissions for S-1 and S-2 are based on AP-42 data.

0.00

0.00

0.00

2. PM and volatile organic compound (VOC) emission data from the mold making and sand reclamation operation (SC-1) are based on stack testing data and release agent usage rate. PM emissions are controlled by a cyclone wet scrubber and VOC emissions are limited to 16.7 tons per year to avoid the requirements of 326 IAC 2-2 (PSD).

3. PM and VOC emission data from the shakeout and virbrating dump conveyor operation (SC-2) are based on stack testing data.

4. VOC emission data from the old core machines (SC-3) are based on American Foundrymen Society guidance. VOC emissions are limited to 30 tons per year to avoid the requirements of 326 IAC 2-2 (PSD).

5. VOC emission data from the core machines (SC-4) are based on American Foundrymen Society guidance. The VOC emissions are limited to 24 tons per year to avoid the requirements of 326 IAC 8-1-6 (BACT).

0.00

0.00

0.00

0.00

271.32

265.40

6. VOC emission data from the prototype core machine (SC-5) are based on American Foundrymen Society guidance.

0.64

0.00

0.00

7. PM emissions from the knockout operation (BH-1) are based on a mass balance study. VOC emissions were based on stack testing.

8. PM and VOC emissions from the sawing and grinding operation (BH-2) are based on AIRS emission factors.

9. PM and VOC emissions from the shot blast operation (BH-3) are based on STAPPA/ ALAPCO emission factors (Page 3-12). The PM and PM10 emissions are limited to 24 and 14 tons per year, respectively, to avoid the requirements of 326 IAC 2-2 (PSD).

10. Pollutant emissions from the pouring operation (F-1) are based on FIRE Version 5.0 emission factors.

11. PM and VOC emissions from the machining operation (F-5) are based on engineering calculations.

12. Pollutant emissions from the combustion operations (F-6) are based on AP-42. 13. Pollutant emissions from the roadways (F-7) are based on AP-42.

#### Appendix A: Emission Calculations Natural Gas Combustion MM Btu/hr 0.3 - < 10

Company Name: CMI-Wabash Cast, Inc.

Address City IN Zip: 3837 West Mill Street Extended, Wabash IN 46992

**CP**: T169-6598 **Plt ID**: 169-00042 **Reviewer**: Trish Earls

Date: November 26, 1997

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/yr

7.0 61.3

Heat Input Capacity includes:

One (1) prototype crucible furnace rated at 7 mmBtu/hr

	Pollutant					
Emission Factor in lb/MMCF	PM 11.9	PM10 11.9	SO2 0.6	NOx 100.0	VOC 5.8	CO 21.0
Potential Emission in tons/yr	0.36	0.36	0.02	3.07	0.18	0.64

#### Methodology:

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36 Emission Factors for CO: uncontrolled = 21, Low NOx burner = 15, Flue Gas Recirculation = ND. Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-03-006-03

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

# Appendix A: Emissions Calculations Natural Gas Combustion Only 10 < MM BTU/HR <100 Small Industrial Boiler

Company Name: CMI-Wabash Cast, Inc.

Address City IN Zip: 3837 West Mill Street Extended, Wabash IN 46992

**CP:** T169-6598 **Plt ID:** 169-00042

Reviewer: Trish Earls

Date: November 26, 1997

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/yr

78.0 683.3

Heat Input Capacity includes:

2 reverberatory furnaces rated at 39 mmBtu/hr each

	Pollutant					
Emission Factor in Ib/MMCF	PM	PM10	SO2	NOx 140.0	VOC	CO
Emission Factor in lb/MMCF	14.0	14.0	0.6	140.0	2.8	35.0
Potential Emission in tons/yr	4.8	4.8	0.2	47.8	1.0	12.0

#### Methodology:

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: Uncontrolled = 100, Low NOx burner = 83, Flue gas recirculation = 30 Emission Factors for CO: Uncontrolled = 35, Low NOx Burner = 61, Flue gas recirculation = 34 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (Ib/MMCF)/2,000 Ib/ton

#### Appendix A: Emission Calculations Natural Gas Combustion MM Btu/hr 0.3 - < 10

Company Name: CMI-Wabash Cast, Inc.

Address City IN Zip: 3837 West Mill Street Extended, Wabash IN 46992

**CP**: T169-6598 **Plt ID**: 169-00042 **Reviewer**: Trish Earls

Date: November 26, 1997

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/yr

49.0 429.2

Heat Input Capacity includes:

Nine (9) air make- up units rated at 5 mmBtu/hr each

One (1) sand dryer rated at 4 mmBtu/hr

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	11.9	11.9	0.6	100.0	5.8	21.0
Potential Emission in tons/yr	2.55	2.55	0.13	21.46	1.24	4.51

#### Methodology:

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36 Emission Factors for CO: uncontrolled = 21, Low NOx burner = 15, Flue Gas Recirculation = ND. Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-03-006-03

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

#### **Appendix A: Emission Calculations**

Company Name: CMI-Wabash Cast, Inc.

Address City, IN Zip: 3837 West Mill Street Extended, Wabash, IN 46992

CP: T169-6598
Pit ID: 169-00042
Reviewer: Trish Earls

Date: November 26, 1997

#### Emission Unit S-1: Reverberatory Furnaces Data is for melting in each reverberatory furnace

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lb/ton)	Emisson Rate (Ib/hr)	Maximum Uncontrolled Emissions (tons/yr)
PM	7.0	0.180	1.26	5.52
PM10	7.0	0.108	0.76	3.31
S02	7.0	0.900	6.30	27.59
NOx	7.0	0.760	5.32	23.30
VOC	7.0	0.200	1.40	6.13
CO	7.0	0.000	0.00	0.00
Mangense	7.0	0.0002	0.001	0.01
Chromium	7.0	0.0002	0.001	0.01
Nickel	7.0	0.0002	0.001	0.01

#### Note:

Particulate matter emission data from melting are based on stack testing data. All other emissions based on AP-42 data.

#### **Appendix A: Emission Calculations**

Company Name: CMI-Wabash Cast, Inc.

Address City, IN Zip: 3837 West Mill Street Extended, Wabash, IN 46992

CP: T169-6598
Pit ID: 169-00042
Reviewer: Trish Earls

Date: November 26, 1997

#### **Emission Unit S-2: Prototype Crucible Furnace**

Pollutant	Maximum Rate	Emission Factor	Emisson Rate	Maximum Uncontrolled
	(tons/hr)	(lb/ton)	(lb/hr)	Emissions (tons/yr)
PM	1.25	1.900	2.38	10.40
PM10	1.25	1.700	2.13	9.31
S02	1.25	0.900	1.13	4.93
NOx	1.25	0.760	0.95	4.16
VOC	1.25	0.000	0.00	0.00
CO	1.25	0.000	0.00	0.00
Mangense	1.25	0.0002	0.000	0.00
Chromium	1.25	0.0002	0.000	0.00
Nickel	1.25	0.0002	0.000	0.00

#### Note:

Particulate matter emission data from FIRE version 5.0. All other emissions based on AP-42 data.

## Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for a Part 70 Operating Permit and Enhanced New Source Review (ENSR)

Source Name: CMI-Wabash Cast, Inc.

Source Location: 3837 West Mill Street Extended, Wabash, Indiana 46992

County: Wabash SIC Code: 3365

Operation Permit No.: T169-6598-00042 Permit Reviewer: Trish Earls/EVP

On April 1, 1998, the Office of Air Management (OAM) had a notice published in the Wabash Plain Dealer, Wabash, Indiana, stating that CMI-Wabash Cast, Inc. had applied for a Part 70 Operating Permit to operate an aluminum foundry operation. The notice also stated that OAM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAM has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified to reflect these changes.

1. Section A (Source Summary) has been revised to clarify that the description of the source in conditions A.1 through A.3 is informational only and does not constitute separately enforceable conditions. The descriptive information in other permit conditions is enforceable.

#### **SECTION A**

#### **SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) and presented in the permit application. The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

- Condition A.5 (Prior Permit Conditions Superceded) has been deleted. Language has been added to B.14 (Permit Shield) to address the effect of prior permit conditions. U.S. EPA stated that it would object to any permit that contained such supersession language.
- 3. Condition B.1(b) (Permit No Defense) has been revised to reference the permit shield condition that is found later in Section B.

 CMI-Wabash Cast, Inc.
 Page 2 of 31

 Wabash, Indiana
 OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

- 4. Condition B.8 (c) (Duty to Supplement Information) has been revised to clarify how the Permittee may assert a claim that records are confidential information:
  - (c) Upon request, the Permittee shall also furnish to IDEM, OAM copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, For information claimed to be confidential, the Permittee must shall furnish such records to IDEM, OAM along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must shall furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.
- 5. Section B.11 (c) (Annual Compliance Certification) has been revised to match changes to the federal Part 70 rules. The language in (c)(3) has been revised since it appears to be a clarification rather than a change in the requirement. The language in (c)(5) has been added to clarify the treatment of insignificant activities. OAM is revising the nonrule policy document Air-007 NPD to provide more guidance regarding the annual compliance certification requirements for sources with Title V permits:
  - (c) The annual compliance certification report shall include the following:
    - (1) The identification of each term or condition of this permit that is the basis of the certification;
    - (2) The compliance status;
    - (3) Whether compliance was **based on** continuous or intermittent **data**;
    - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
    - (5) Any insignificant activity that has been added without a permit revision; and
    - (5) (6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, may require to determine the compliance status of the source.

The notification which shall be submitted submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

6. Condition B.12 (a) (Preventive Maintenance Plan) has been revised to more closely match the language in 326 IAC 1-6-3. A provision allowing a one time extension of the time within which the Permittee must prepare and maintain the PMP has also been added to (a).

CMI-Wabash Cast, Inc.

Page 3 of 31
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each **facility**:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission units and associated emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM.
- 7. Condition B.14 (Permit Shield) condition has been revised to clarify how the permit shield affects applicable requirements from previous permits and how the permit shield affects determinations that a specific requirement is not applicable to the source.
- B.14 Permit Shield [326 IAC 2-7-15]
  - (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
  - (a) (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either of the following:
    - (1) The applicable requirements are included and specifically identified in this permit; or

Page 4 of 31 OP No. T169-6598-00042

- (2) IDEM, OAM, in acting on the Part 70 permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 permit includes the determination or a concise summary thereof. The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (b) (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) (d) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order. No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (d) (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(8)]

CMI-Wabash Cast, Inc.

Page 5 of 31
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

8. Condition B.16 (Deviations from Permit Requirements and Conditions) has been revised to add the deviation terminology that had been contained in Section C, in the General Reporting Requirements condition:

#### B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) An emergency as defined in 326 IAC 2-7-1(12); or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (b) (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.
- 9. Condition B.18 (a) (Permit Renewal) has been changed as follows to clarify the treatment of certain trivial activities:
  - (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

CMI-Wabash Cast, Inc.

Page 6 of 31
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

10. Conditions B.19 (Administrative Permit Amendment), B.20 (Minor Permit Modification), and B.21 (Significant Permit Modification) have all been combined into one condition numbered B.19 (Permit Amendment or Modification). Conditions B.20 and B.21 have been deleted. The new Condition B.19 (Permit Amendment or Modification) will read as follows:

#### B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- 11. Condition B.26 (now renumbered B.24) (Inspection and Entry) has been revised to remove the requirement for an IDEM identification card, which other agencies do not have.

#### B.26 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of <del>IDEM</del> **proper** identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

  [326 IAC 2-7-6(6)]

CMI-Wabash Cast, Inc.

Page 7 of 31
Wabash, Indiana

OP No. T169-6598-00042

(1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

- (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]
- 12. Condition B.27 (b)(now re-numbered B.25) (Transfer of Ownership or Operation) has been revised to clarify that this notification does not require a certification by a responsible official.
  - (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- 13. Condition B.28 (now renumbered B.26) (Annual Fee Payment) has been revised to clarify the Permittee's responsibility for the timely payment of annual fees.

#### B.28 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

Permit Reviewer: TE/EVP

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. or in a time period consistent with the fee schedule established in 326 IAC 2-7-19. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) If the Permittee does not receive a bill from IDEM, OAM, thirty (30) calendar days before the due date, The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee. The applicable fee is due April 1 of each year.
- 14. Condition C.2 (Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour) is a new condition that reads as follows to address the PM emission limitation for facilities below 100 pounds per hour.

CMI-Wabash Cast, Inc.

Page 8 of 31
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

15. Condition C.2 (now renumbered as C.3) (Opacity) has been revised as follows:

#### **C.3** Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Visible Emissions Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions opacity shall meet the following, unless otherwise stated in this permit:

- (a) Visible Emissions Opacity shall not exceed an average of forty percent (40%) opacity in any one (1) six (6) minute averaging period in twenty-four (24) consecutive readings, as determined in 326 IAC 5-1-4.
- (b) Visible Emissions Opacity shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9, or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor), in a six (6) hour period.
- 16. Condition C.6 (now renumbered C.7) (Operation of Equipment) has been revised to clarify the requirement.
- C.7 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation. as described in Section D of this permit.

17. Condition C.7 (now re-numbered C.8) (Stack Height) has been revised to clarify the requirement.

#### C.8 Stack Height [326 IAC 1-7]

- (a) The Permittee shall comply with the **applicable** provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.
- (b) Any change in an applicable stack shall require prior approval from IDEM, OAM.
- 18. Conditions C.8 (Asbestos Abatement Projects-Accreditation) and C.15 (Asbestos Abatement Projects) have been combined into one new condition C.8 (Asbestos Abatement Projects).

#### C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

CMI-Wabash Cast, Inc.

Page 9 of 31
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
  - (A) Asbestos removal or demolition start date;
  - (B) Removal or demolition contractor; or
  - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
  The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4
  and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are
  mandatory for any removal or disturbance of RACM greater than three (3) linear
  feet on pipes or three (3) square feet on any other facility components or a total of
  at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
  The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or
  operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos
  Inspector to thoroughly inspect the affected portion of the facility for the presence
  of asbestos. The requirement that the inspector be accredited is federally
  enforceable.
- 19. Condition C.9 (now re-numbered C.10) (Performance Testing) is revised to correct a rule citation, add a notification requirement, and clarify that any submittal under this condition does not require a certification by a responsible official:

CMI-Wabash Cast, Inc.

Page 10 of 31
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### **C.10** Performance Testing [326 IAC 3-2.1] [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-2.1 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days before prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

20. Condition C.10 (now re-numbered C.11) (Compliance Schedule) has been revised to more closely match the rule language.

#### C.11 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

- (a) Has certified that all facilities at this source are in compliance with all applicable requirements; and Will continue to comply with such requirements that become effective during the term of this permit; and
- (b) Has submitted a statement that the Permittee will continue to comply with such requirements; and
- (c) Will comply with such applicable requirements that become effective during the term of this permit. Has certified that all facilities at this source are in compliance with all applicable requirements.
- 21. Condition C.11 (now re-numbered C.12) (Compliance Monitoring) has been revised to allow a one time extension of the time to install and initiate any required monitoring.

#### **C.12** Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee shall notifies:

CMI-Wabash Cast, Inc.

Page 11 of 31
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, **prior to the end of the initial ninety (90) day compliance schedule** <del>no more than ninety (90) days after receipt of this permit,</del> with full justification of the reasons for the inability to meet this date. <del>and a schedule which it expects to meet. If a denial of the request is not received before the monitoring is fully implemented, the schedule shall be deemed approved.</del>

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

22. Condition C.13 (now re-numbered as C.14) (Monitoring Methods) has been revised to clarify the requirement.

#### C.14 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the **applicable** requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

23. Condition C.17 (Risk Management Plan) has been revised to more closely match the rule language of 40 CFR 68 and clarify that any submittal under this condition requires a certification by a responsible official.

#### C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present **in a process** in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
  - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
  - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
  - (3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

24. Condition C.18 (Compliance Monitoring Plan-Failure to Take Response Steps) the following rule cites were changed and added to the title, as follows:

CMI-Wabash Cast, Inc.

Page 12 of 31
Wabash, Indiana

OP No. T169-6598-00042

C.18 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 1-6]

Permit Reviewer: TE/EVP

- 25. Condition C.19 is revised to add the following rule cites to the title, and clarify that any submittal under this condition does not require a certification by a responsible official.
- C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
  - (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
  - (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- 26. Condition C.20 (a) has been revised to clarify the certification requirement for the emission statement.
- C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]
  - (a) The Permittee shall submit an certified, annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- 27. Condition C.22 (General Record Keeping) is revised to add the following rule citation and to change the requirements for keeping records, making records available, and furnishing records, to more closely match the rule language as follows:

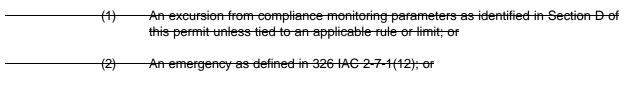
Page 13 of 31 OP No. T169-6598-00042

#### C.22 General Record Keeping Requirements [326 IAC 2-7-5(3)(B)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request within one (1) hour upon verbal request of an IDEM, OAM representative, for a minimum of three (3) years. They The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request providing they are made available within thirty (30) days after written request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- 28. Condition C.23 (General Reporting Requirements) is revised to clarify what is included in the compliance monitoring reports and clarify that any submittal under this condition does not require a certification by a responsible official. The deviation terminology was moved to a Section B condition titled Deviations from Permit Requirements and Conditions.

#### C.23 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the **compliance monitoring** requirements stated in this permit the source shall submit a Quarterly Compliance **Monitoring** Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:
  - Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:



(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

Page 14 of 31 OP No. T169-6598-00042

- (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.
- A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

29. The facility description box in all D Sections is revised to include the rule citation:

#### Facility Description [326 IAC 2-7-5(15)]

- 30. The Certification Form is revised to clarify which forms require a certification.
- 31. The Emergency/Deviation Occurrence Reporting Form is revised to eliminate the certification requirement.
- 32. The Quarterly Compliance Report is renamed the Quarterly Compliance Monitoring Report and is revised to make it easier to understand and use.

Page 15 of 31 OP No. T169-6598-00042

#### INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT **COMPLIANCE DATA SECTION**

#### **PART 70 OPERATING PERMIT CERTIFICATION**

Source Name: CMI-Wabash Cast, Inc.

3837 West Mill Street Extended, Wabash, IN 46992 Source Address:

Mailing Address: 3837 West Mill Street Extended, Wabash, IN 46992 Part 70 Permit No.: T169-6598-00042
This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.
Please check what document is being certified:
9 Annual Compliance Certification Letter
-9 Emergency/Deviation Occurrence Reporting Form-
9 Test Result (specify)
9 Report (specify)
9 Notification (specify)
9 Other (specify)
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
Signature:
Printed Name:
Title/Position:
Date:

Page 16 of 31 OP No. T169-6598-00042

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION P.O. Box 6015

100 North Senate Avenue Indianapolis, Indiana 46206-6015 Phone: 317-233-5674 Fax: 317-233-5967

### PART 70 OPERATING PERMIT EMERGENCY/DEVIATION OCCURRENCE REPORT

Source Name: CMI-Wabash Cast, Inc.

Source Address: 3837 West Mill Street Extended, Wabash, IN 46992 Mailing Address: 3837 West Mill Street Extended, Wabash, IN 46992

Part 70 Permit No.: T169-6598-00042

Page 1 of 2

Check either No. 1 or No.2

- 9 1. This is an emergency as defined in 326 IAC 2-7-1(12)
  - The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
  - C The Permittee must submit notice in writing or by facsimile within two (2) days
    - (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
- **9** 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c)
  - C The Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

Page 17 of 31 OP No. T169-6598-00042

f any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency/Deviation started:	
Date/Time Emergency/Deviation was corrected:	
Was the facility being properly operated at the time of the emergency/deviation?  Describe:	Y N
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>X</sub> , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency/deviation:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are necess imminent injury to persons, severe damage to equipment, substantial loss of capital if of product or raw materials of substantial economic value:	
Form Completed by: Title / Position: Date: Phone:	

Attach a signed certification to complete this report.

Page 18 of 31 OP No. T169-6598-00042

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

### PART 70 OPERATING PERMIT QUARTERLY COMPLIANCE MONITORING REPORT

Source Name: Source Address: Mailing Address: Part 70 Permit No.:	CMI-Wabash Cast, Inc. 3837 West Mill Street Extended, Wabash, IN 46992 3837 West Mill Street Extended, Wabash, IN 46992 T169-6598-00042						
	Months:	to _	Yea	r:			
This report is an affirmation that the source has met all the <b>compliance monitoring</b> requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the <b>compliance monitoring</b> requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify zero in the column marked "No Deviations". in the box marked "No deviations occurred this reporting period".							
9 NO DEVIATION	IS OCCURRED	THIS REPOR	RTING PERIOD.				
9 THE FOLLOWII COMPLIANCE REC				NG PERIOD: <del>LIST EA</del>	CH		
Compliance Mo (e.g. Perm	onitoring Required Condition D.		Number of Deviations	Date of each Deviations	No Deviations		
		By:					

Attach a signed certification to complete this report.

33. Due to recent EPA guidance, IDEM will no longer use the 11/12ths limit. A fixed monthly limit or a 12-consecutive months limit will be used. Based on this, CMI-Wabash Cast, Inc. has indicated that they would prefer to have all of the fixed monthly limits changed to 12-consecutive month rolling limits. Therefore, condition D.3.1, page 33 of 56, and condition D.5.1, page 39 of 56, of the Part 70 Operating permit have been revised as follows (changes in bold or strikeout):

#### D.3.1 Volatile Organic Compounds [326 IAC 2-2]

The VOC emissions from the mold making and sand reclamation operation (SC-1) shall be limited to <del>1.4 tons per month,</del> **16.7 tons per twelve (12) consecutive month period,** therefore, the source is not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

#### D.5.1 Volatile Organic Compounds (VOCs) [326 IAC 2-2]

The VOC emissions from the six (6) old core machines (SC-3) shall be limited to 2.5 tons per month, 30.0 tons per twelve (12) consecutive month period, therefore, the source is not subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

The reporting forms on pages 54 and 55 of the Part 70 Operating permit will also be revised so that the fixed monthly limits are changed to 12-month rolling limits.

34. Additional compliance monitoring conditions have been added to sections D.3 and D.4 to verify that the wet scrubbers controlling the mold making and sand reclamation operation (SC-1) and the shakeout and vibrating dump conveyor are operating properly to ensure compliance with 326 IAC 6-3-2. Two new conditions have been added to each section and read as follows:

#### D.3.8 Cyclone Wet Scrubber Inspections

An inspection shall be performed each calender quarter of the cyclone wet scrubber controlling the mold making and sand reclamation operation when venting to the atmosphere. A cyclone wet scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All leakage shall be repaired.

#### D.3.9 Failure Detection

In the event that cyclone wet scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### D.4.7 Cyclone Wet Scrubber Inspections

An inspection shall be performed each calender quarter of the cyclone wet scrubber controlling the shakeout and vibrating dump conveyor when venting to the atmosphere. A cyclone wet scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All leakage shall be repaired.

#### D.4.8 Failure Detection

In the event that cyclone wet scrubber failure has been observed:

CMI-Wabash Cast, Inc.

Page 20 of 31
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

All subsequent conditions in sections D.3 and D.4 have been re-numbered accordingly.

Two (2) additional compliance monitoring conditions have also been added to sections D.5 and D.8 to verify that the six (6) acid scrubbers controlling VOC emissions from the six (6) old core machines (SC-3) are operating properly to avoid the requirements of 326 IAC 2-2 and to verify that the one (1) acid scrubber controlling VOC emissions from the two (2) core machines (SC-4) are operating properly to comply with 326 IAC 8-1-6 (BACT). All subsequent conditions in sections D.5 and D.8 have been re-numbered accordingly. The new conditions read as follows:

#### D.5.4 Acid Scrubber Inspections

An inspection shall be performed each calender quarter of the six (6) acid scrubbers controlling the six (6) old core machines when venting to the atmosphere. An acid scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All leakage shall be repaired.

#### D.5.5 Failure Detection

In the event that acid scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### D.8.6 Acid Scrubber Inspections

An inspection shall be performed each calender quarter of the one (1) acid scrubber controlling the two (2) core machines (SC-4) when venting to the atmosphere. An acid scrubber inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All leakage shall be repaired.

#### D.8.7 Failure Detection

In the event that acid scrubber failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Wabash, Indiana Permit Reviewer: TE/EVP

36. Torn or otherwise failed bags can have a dramatic effect on bag house performance and few sources have reliable information that demonstrates that compliance can be achieved when compartments are "on line" with torn bags. Conditions D.6.7 (now re-numbered as D.6.8) and D.10.8 (now re-numbered as D.10.9) have been revised to clarify that the emergency provisions of the Title V rule and the corresponding condition in this permit may take precedence if applicable. Also, a baghouse inspections condition for the baghouse controlling the knockout operation (BH-1) in Section D.6 and a baghouse inspections condition for the baghouse controlling the mechanical blasting operation (BH-3) in Section D.10 were added to assure the proper operation of the baghouses. All subsequent conditions in sections D.6 and D.10 have been re-numbered accordingly. Conditions D.6.7 and D.6.8 and conditions D.10.8 and D.10.9 now read as follows (changes in bold):

#### D.6.7 **Baghouse Inspections**

An inspection shall be performed each calender quarter of all bags controlling the knockout operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.6.**78** Broken **or Failed** Bag <del>or Failure</del> Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

#### D.10.8 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the mechanical blasting operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.10.89 Broken or Failed Bag or Failure Detection

In the event that bag failure has been observed.

Page 22 of 31 OP No. T169-6598-00042

CMI-Wabash Cast, Inc. Wabash, Indiana Permit Reviewer: TE/EVP

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- (b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B Emergency Provisions).
- 37. To clarify that this operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2, the State Rule Applicability Entire Source section of the TSD is revised to read as follows (changes in bold):

#### 326 IAC 2-2 (Prevention of Significant Deterioration)

- This source, which is one of the twenty-eight (28) listed source categories under 326 IAC 2-2 (PSD), specifically, a secondary metal production plant, is not subject to the requirements of 326 IAC 2-2 (PSD). To avoid the requirements of 326 IAC 2-2, the potential VOC emissions from the mold making and sand reclamation operation (SC-1), constructed in 1978, shall be limited to 16.7 tons per year, and the potential VOC emissions from the old core machines (SC-3), constructed in 1978, shall be limited to 30.0 tons per year, such that potential VOC emissions from the original equipment at the source in 1978 are limited to 99 tons per year, making the source a minor PSD source in 1978. Therefore, the installation of the reverberatory melting and combustion operation (S-1) and the prototype reverberatory melting and combustion operation (S-2) in 1993, qualifies as a minor modification to an existing minor PSD source.
- b) Controlled VOC emissions from the core machines (SC-4), constructed in 1994, are less than 39.0 tons per year, therefore, the installation of the new core machines (SC-4) in 1994 was a minor modification to an existing major source.
- c) Potential PM and PM<sub>10</sub> emissions from the shot blasting operation (BH-3), constructed in 1995, are limited to 24.0 and 14.0 tons per year, respectively. Therefore, the installation of the shot blasting operation (BH-3) in 1995 was a minor modification to an existing major source.

Although the source is now a major PSD source, all of the above mentioned modifications to the source were minor PSD modifications and the requirements of 326 IAC 2-2 (PSD) do not apply.

On April 22, 1998, Matt Nicely submitted comments on the proposed Part 70 Operating Permit on behalf of CMI-Wabash Cast, Inc. The summary of the comments and corresponding responses is as follows:

CMI-Wabash Cast, Inc.
Page 23 of 31
Wabash, Indiana
OP No. T169-6598-00042
Permit Reviewer: TE/EVP

#### Comment #1

CMI believes that prototype core making should not be cited as a potential enforcement issue. Prototyping is a normal core making activity carried out in most existing foundries. The usage of sand and binders (to make cores) was specifically stated in CMI's original Operation Permit Application and inherently incorporated under the original Operation Permit issued by IDEM. No distinction between production core making operations and prototyping was made at that time. In an attempt to more accurately estimate emissions and manage different operations for the Part 70 air permitting program, CMI has segregated production and prototype core making operations. CMI requests that IDEM remove prototype core making from the list of equipment listed under Enforcement Issue on page 3 of 14 in the Technical Support Document.

#### Response #1

Since CMI has stated that the prototype core making operations (ID No. SC-5) were included in the application for Operation Permit No. 85-09-82-0109, issued on August 24, 1978, and because the potential emissions from the prototype core making operation are at exemption level, this operation will be removed from the list of unpermitted emission units and will be added to the list of permitted emission units in the Technical Support Document (TSD). Also, these sections and the Enforcement Issue section of the TSD have been modified to reflect changes in the TSD template. The sections of the TSD listing the permitted emission units and the unpermitted emission units have been revised as shown in Response #5. The Enforcement Issue section of the TSD is revised as follows (changes in bold):

#### **Enforcement Issue**

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR.*
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

#### Comment #2

For unit SC-3, please change the stated capacity from "5,371 pounds of cores per hour" to "6,300 pounds of cores per hour". The flow diagram in the application stated that of the typical cores produced, 5,371 pounds were good and 637 pounds were scrap. These figures are just estimates and have no effect on emissions or any meaning to IDEM. Because all cores are produced, the same amount of sand will be processed. It is possible that all good cores will be produced. As stated in the application, the core machines are capable of producing 6,300 cores per hour.

CMI-Wabash Cast, Inc.

Page 24 of 31
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

Response #2

## The maximum capacity of the six (6) old core machines (SC-3) will be revised from 5,731 pounds of cores

per hour to 6,300 pounds of cores per hour. The equipment unit description (item (5)) in the Permitted Emission Units and Pollution Control Equipment section of the TSD has been revised accordingly. The emission unit description for the old core machines (SC-3) has also been revised in Section A.2 (item (5)) of the Title V Operating Permit, page 7 of 56, and in Section D.5, page 39 of 56. See Response #5 for the revised emission unit description of the old core machines (SC-3). Changing the maximum capacity of the core machines has no effect on potential emissions, since the same amount of sand will be processed, and does not result in any changes to the conditions or emission limits included in the Title V Operating Permit.

#### Comment #3

For unit SC-4, please change the stated capacity from "3,002 pounds of cores per hour" to "3,300 pounds of cores per hour". The flow diagram in the application stated that of the typical cores produced, 3,002 pounds were good and 298 pounds were scrap. These figures are just estimates and have no effect on emissions or any meaning to IDEM. Because all cores are produced, the same amount of sand will be processed. It is possible that all good cores will be produced. As stated in the application, the core machines are capable of producing 3,300 cores per hour.

#### Response #3

The maximum capacity of the two (2) core machines (SC-4) will be revised from 3,002 pounds of cores per hour to 3,300 pounds of cores per hour. The equipment unit description (item (1)) in the Unpermitted Emission Units and Pollution Control Equipment section of the TSD has been revised accordingly. The emission unit description for the two (2) core machines (SC-4) has also been revised in Section A.2 (item (8)) of the Title V Operating Permit, page 7 of 56, and in Section D.8, page 45 of 56. See Response #5 for the revised emission unit description of the two (2) core machines (SC-4). Changing the maximum capacity of the core machines has no effect on potential emissions, since the same amount of sand will be processed, and does not result in any changes to the conditions or emission limits included in the Title V Operating Permit.

#### Comment #4

In Section D.1, for unit S-1, in the Part 70 Operating Permit, please change the Testing Requirements condition, condition D.1.3, from 30-36 months to 24-36 months. CMI would like a year window to test its equipment, especially since this six-month time frame will likely fall during the winter months (based on the estimated date of issuance of this permit).

#### Response #4

Condition D.1.3 of the Part 70 Operating permit, page 29 of 56, has been revised to incorporate the requested change and also to incorporate new model permit language. The condition is revised as follows (changes in bold):

#### D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between **24** and 36 months after issuance of this permit, the Permittee shall perform PM testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. **In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.** 

CMI-Wabash Cast, Inc.
Page 25 of 31
Wabash, Indiana
OP No. T169-6598-00042
Permit Reviewer: TE/EVP

#### Comment #5

Please remove condition D.2.2 of the Part 70 Operating Permit which requires testing for unit S-2. This unit is a small prototype furnace that is not continuously operated and only used for prototyping purposes. The furnace does not have an outside stack and exhausts through a flue inside of the facility (it would be difficult to test - a stack extension would need to be constructed). Realistically, any air emissions problems would result in an indoor air quality problem and would be addressed immediately. Furthermore, potential emissions from this furnace are barely above significance thresholds based on AP-42 factors, and hardly at levels that warrant periodic testing.

#### Response #5

Based on further discussion with the applicant, the prototype reverberatory furnace was incorrectly described and is really a prototype crucible furnace. Therefore, the PM and PM10 emission factors based on stack testing on one of the reverberatory furnaces, are no longer valid for the prototype crucible furnace. The emission calculations for the prototype furnace were revised using PM and PM10 emission factors from FIRE version 5.0. Because of this, condition D.2.2 of the Part 70 Operating permit, page 31 of 56, has been revised to state that stack testing is no longer required and to include new model permit language. Condition D.2.2 now reads as follows (changes in bold):

#### D.2.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Also, the emission unit description of the prototype furnace has been revised to specify that it is a crucible furnace. The equipment unit description (item (2)) in the Permitted Emission Units and Pollution Control Equipment section of the TSD has been revised accordingly. The emission unit description for the prototype furnace (S-2) has also been revised in Section A.2 (item (2)) of the Title V Operating Permit, page 7 of 56, and in Section D.2, page 31 of 56. Also, references to the prototype melting/holding furnace in conditions D.2.1, D.2.3 and D.2.4 have been replaced with prototype crucible furnace. The sections of the TSD listing the permitted emission units and the unpermitted emission units have been revised, including the revised emission unit descriptions for the six (6) old core machines (SC-3), the two (2) core machines (SC-4), and the prototype crucible furnace (S-2), as well as revisions made to the TSD template, as follows (changes in bold for emphasis):

#### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (1) One (1) melting and combustion operation (S-1) consisting of two (2) reverberatory furnaces each processing aluminum at a rate of 7.0 tons per hour, each rated at 39 million (mm) British thermal units (Btu) per hour, combusting natural gas, and exhausting to two (2) stacks (Stacks 2.41 and 2.42). Note: the two furnaces do not melt simultaneously;
- One (1) melting and combustion operation (S-2) consisting of one (1) prototype **crucible** furnace processing aluminum at a rate of 1.25 tons per hour, rated at 7 million (mm) British thermal units (Btu) per hour, combusting natural gas;

CMI-Wabash Cast, Inc.

Page 26 of 31
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(3) One (1) mold making and sand reclamation operation (SC-1) processing a metal throughput of 11.39 tons per hour with a cyclone wet scrubber for particulate matter control and exhausting to one (1) stack (Stack 2.11);

- (4) One (1) shakeout and vibrating dump conveyor (SC-2) processing a metal throughput of 11.39 tons per hour with a cyclone wet scrubber for particulate matter control and exhausting to one (1) stack (Stack 2.12);
- (5) Six (6) old core machines (SC-3) each capable of producing a maximum of **6,300** pounds of cores per hour, with six (6) acid scrubbers for VOC control and exhausting to six (6) stacks (Stacks 1.11, 1.12, 1.14, 1.15, 1.16, and 1.17);
- (6) One (1) knockout operation (BH-1), including a rotary sand separator with a baghouse for particulate matter control, exhausting to one (1) stack (Stack 2.21);
- (7) One (1) pouring operation (F-1) utilizing molten aluminum from the melting operations and a primary aluminum vendor for a process rate of 11.39 tons per hour; and
- (8) One (1) manual prototype core making operation (SC-5) with a maximum capacity of processing 200 pounds of sand per hour, having no emission control equipment or external stack or vent.

#### Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR

The source also consists of the following unpermitted facilities/units:

- (1) Two (2) core machines (SC-4) each capable of producing a maximum of **3,300** pounds of cores per hour, with one (1) acid scrubber for VOC control and exhausting to one (1) stack (Stack 1.18); and
- (2) One (1) mechanical blasting operation (BH-3) with a process rate of 32.7 tons per hour that is a combination of the steel shot throw rate (27 tons per hour) and the aluminum casting throughput (5.7 tons per hour), with a dust collector for particulate matter control.

#### Comment #6

In Sections D.3 and D.4 of the Part 70 Operating Permit, for units SC-1 and SC-2, respectively, please change the Testing Requirements conditions, conditions D.3.4 and D.4.3, from 30-36 months to 24-36 months. CMI would like a year window to test its equipment, especially since this six-month time frame will likely fall during the winter months (based on the estimated date of issuance of this permit).

#### Response #6

Condition D.3.4 of the Part 70 Operating permit, page 33 of 56, and condition D.4.3 of the Part 70 Operating permit, page 36 of 56, have been revised to incorporate the requested change and to incorporate new model permit language. The conditions are revised as follows (changes in bold):

CMI-Wabash Cast, Inc.

Page 27 of 31
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

#### D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between **24** and 36 months after issuance of this permit, the Permittee shall perform PM testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. **In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.** 

#### D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

During the period between **24** and 36 months after issuance of this permit, the Permittee shall perform PM testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. **In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.** 

Note: All other testing conditions in Sections D.5 through D.10 have been revised to include the new model permit language.

#### Comment #7

Please remove parts (4) and (5) from condition D.4.7(b) of the Part 70 Operating permit for unit SC-2. No operators are involved with this operation, therefore, these requirements are not applicable. Furthermore, CMI-Wabash Cast does not have QA/QC procedures or SOPs.

#### Response #7

Although there are no operators directly involved with this operation, CMI-Wabash Cast, Inc. is the operator of the entire source including this operation. In order to ensure that the wet scrubber is operating properly to control PM emissions below the 326 IAC 6-3 allowable emission rate, there must be QA/QC procedures and standard operating procedures for the wet scrubber. Since it has been stated by the applicant that CMI-Wabash Cast, Inc. is QS-9001 certified and that the source has Work Instructions containing information normally included in QA/QC procedures and SOPs, condition D.4.7 (now re-numbered as D.4.9) of the Part 70 Operating permit, page 37 of 56, will be revised to state that the applicant shall maintain records of QA/QC procedures or their equivalent, and SOPs or their equivalent. Condition D.4.9 part (b) is revised to read as follows (changes in bold):

- (b) To document compliance with Condition D.4.6, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation:
    - (A) Inlet and outlet differential static pressure; and
    - (B) Liquid flow rate.
  - (2) Documentation of all response steps implemented, per event .
  - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
  - (4) Quality Assurance/Quality Control (QA/QC) procedures or its equivalent.
  - (5) Operator standard operating procedures (SOP) **or its equivalent**.

CMI-Wabash Cast, Inc.

Page 28 of 31
Wabash, Indiana

OP No. T169-6598-00042

Permit Reviewer: TE/EVP

(6) Manufacturer's specifications or its equivalent.

(7) Equipment "troubleshooting" contingency plan.

#### Comment #8

In condition D.5.3 of the Part 70 Operating permit, for unit SC-3, please change "the pH of the liquid shall be maintained at 4.5 standard units" to "the pH of the liquid shall be maintained at less than or equal to 5 standard units". Per source tests and literature provided to CMI from APC manufacturers, the units are adequately efficient up to 5 standard units. This fact is already reflected in on page 44 of 55, Section D.8, Condition D.8.5, Parametric Monitoring, for the two new core machines. The actual high efficiency range of the scrubbers is at any pH below 5.

Please remove the second paragraph starting "The instrument used for determining pressure...". Because pressure is not applicable to this equipment, and no conditions exist, this paragraph is not relevant.

#### Response #8

Condition D.5.3 of the Part 70 Operating permit, page 39 of 56, has been revised to incorporate the requested changes as follows (changes in bold or strikeout):

#### D.5.3 Parametric Monitoring

The Permittee shall record the pH of the liquid in the six (6) acid scrubbers used in conjunction with the old core machines, at least once daily when the old core machines are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pH of the liquid shall be maintained at **less than or equal to 5.0** standard units. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pH is greater than the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM and shall be calibrated at least once every six (6) months.

#### Comment #9

CMI-Wabash Cast is QS-9001 certified and has Work Instructions that contain information normally included in the QA/QC procedures and SOPs; it does not have QA/QC procedures or SOPs. CMI requests that IDEM replace parts (4) and (5) of conditions D.3.8(c) for unit SC-1, D.5.4(b) for unit SC-3, D.6.8(b) for unit BH-1, D.8.6(a) for unit SC-4, and D.10.9(b) for unit BH-3 with a requirement to maintain Work Instructions.

#### Response #9

If CMI maintains Work Instructions which contain information normally included in QA/QC procedures and SOPs, then these can be considered equivalent to QA/QC procedures and SOPs. Upon request, the source can provide the Work Instructions with the equivalent QA/QC procedures and SOPs highlighted to fulfill the requirements of these conditions. Therefore, conditions D.3.8 (now re-numbered as D.3.10), D.5.4 (now re-numbered as D.5.6), D.6.8 (now re-numbered as D.6.9), D.8.6 (now re-numbered as D.8.8), and D.10.9 (now re-numbered as D.10.10) will be revised to state that the applicant shall maintain records of QA/QC procedures or their equivalent, and SOPs or their equivalent. Part (c)(4) and (5) of condition D.3.10, part (b)(4) and (5) of conditions D.5.6, D.6.9, and D.10.10 and part (a)(4) and (5) of condition D.8.8 are revised to read as follows (changes in bold):

- (4) Quality Assurance/Quality Control (QA/QC) procedures **or its equivalent**.
- (5) Operator standard operating procedures (SOP) **or its equivalent**.

#### Comment #10

In condition D.6.1 of the Part 70 Operating permit for unit BH-1, please specify that the 13.14 tons per hour weight rate is a sand weight rate.

#### Response #10

Condition D.6.1 of the Part 70 Operating permit, page 41 of 56, has been revised to incorporate the requested change as follows (changes in bold):

#### D.6.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable particulate matter (PM) emission rate from the knockout machines and the rotary sand separator (BH-1) shall not exceed 23.0 pounds per hour when operating at a process weight rate of 13.14 tons **of sand** per hour.

The pounds per hour limitation was calculated with the following equation:

 $E = 4.10 \ P^{-0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour = 13.14 tons per hour

 $E = 4.10 (13.14)^{0.67}$ E = 23.0 pounds per hour (100.9 tons per year)

#### Comment #11

Please remove "knockout" from condition D.6.4 of the Part 70 operating permit for unit BH-1. As shown in the flow diagram submitted with the application, the baghouse only controls emissions from the rotary sand separator. Also, remove "and exhausting to the outside atmosphere". The rotary sand separator baghouse outlets inside of the plant.

Page 30 of 31 OP No. T169-6598-00042

CMI-Wabash Cast, Inc. Wabash, Indiana Permit Reviewer: TE/EVP

#### Response #11

Since the rotary sand separator is the source of PM emissions from the knockout operation and the baghouse, which exhausts inside the plant, controls emissions from this unit only, condition D.6.4 of the Part 70 Operating permit, page 41 of 56, was revised to incorporate the requested changes as follows (changes in bold or strikeout):

#### D.6.4 Particulate Matter (PM)

The baghouse for PM control shall be in operation at all times when the knockout machines and the rotary sand separator is facility are in operation and exhausting to the outside atmosphere.

#### Comment #12

In condition D.6.6 of the Part 70 Operating Permit for unit BH-1, please change the cited pressure drop from "within the range of 2.0 and 4.0 inches of water" to "within the range of 0.5 and 5.0 inches of water". CMI believes this is a typographical error. The 0.5 to 5 inches of water range is consistent with information contained in the Technical Support Document (page 13 of 14) and a letter from CMI's baghouse manufacturer that was forwarded to IDEM/Enviroplan during the technical review process.

#### Response #12

This was a typographical error and condition D.6.6 of the Part 70 Operating permit, page 42 of 56, has been revised to correct this as follows (changes in bold):

#### D.6.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the knockout and rotary sand separator process, at least once daily when the knockout and rotary sand separator process is in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of **0.5** and **5.0** inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM and shall be calibrated at least once every six (6) months.

#### Comment #13

In conditions D.6.8 and D.10.9 of the Part 70 Operating permit, for units BH-1 and BH-3, respectively, please remove the requirement to maintain daily records of cleaning cycle frequency and differential pressure. Failure or inadequate cleaning would be detected by abnormal visible emissions, and is covered under the normal PM plan. Extra parametric monitoring conditions beyond normal pressure drop and visible emission readings are excessive and redundant; the conditions only add extra burden to CMI and provide no realistic means of ensuring a higher degree of compliance with conditions or benefitting the environment.

#### Response #13

The OAM has decided that the cleaning cycle frequency and differential pressure are not necessary and can be deleted from the operational parameters to be monitored. Therefore, conditions D.6.8 (now renumbered as D.6.9) part (b)(1), page 42 of 56, and D.10.9 (now renumbered as D.10.10) part (b)(1), page 50 of 56, of the Part 70 Operating permit have been revised as follows (changes in strikeout):

- (b) To document compliance with Condition D.6.6, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation:
    - (A) Inlet and outlet differential static pressure;
    - (B) Cleaning cycle; frequency and differential pressure;
- (b) To document compliance with Condition D.10.6, the Permittee shall maintain the following:
  - (1) Daily records of the following operational parameters during normal operation:
    - (A) Inlet and outlet differential static pressure;
    - (B) Cleaning cycle; frequency and differential pressure;

#### Comment #14

In condition D.8.5 of the Part 70 Operating permit, for unit SC-4, please change the wording from "maintained at 5.0 standard units" to "maintained at less than or equal to 5.0 standard units". This reflects the actual high efficiency range of the TEA scrubber.

Please remove the second paragraph starting "The instrument used for determining pressure...". Because pressure is not applicable to this equipment, and no conditions exist, this paragraph is not relevant.

#### Response #14

Condition D.8.5 of the Part 70 Operating permit, page 45 of 56, has been revised to incorporate the requested changes as follows (changes in bold or strikeout):

#### D.8.5 Parametric Monitoring

The Permittee shall record the pH of the liquid in the acid scrubber used in conjunction with the core machines, at least once daily when the core machines are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pH of the liquid shall be maintained at **less than or equal to** 5.0 standard units. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pH is greater than the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM and shall be calibrated at least once every six (6) months.